

AUG 14 1944

Accounting Review

Accounting Principles and the Current Classification
STEPHEN GILMAN

Termination and Renegotiation
VICTOR H. STEMPF

Aptitude Tests for Accounting Students
BEN BLOOM

Observations of a CPA Examiner
JOHN F. FORBES

The Development of Uniform Examinations
HENRY E. MENDES

Some Early Accountancy Examiners
NORMAN E. WEBSTER

Training for the Public Accounting Profession
RICHARD S. CLAIRE

Progress in CPA Legislation
R. L. BOYD

Professional Accounting Practice Today and Tomorrow
DONALD P. PERRY

General Principles of Cost Accounting
A. L. PRICKETT

The Teaching of Cost Accounting
WYMAN P. FISKE

An Approach to Financial Statement Analysis
ROBERT G. ALLYN

Nationally Used

*Two leading texts which
provide a complete
training in accounting*

Paton's

ESSENTIALS OF ACCOUNTING

"Invaluable aid to an embryo
accountant."

THE WHARTON REVIEW

"Worthy to be set beside any-
thing which has yet been writ-
ten in this field."

THE ACCOUNTANT (LONDON)
\$5.00

ADVANCED ACCOUNTING

"There is, perhaps, no other
accountant who equals Profes-
sor Paton in keenness of in-
sight, careful analysis and
penetrating interpretation."

JL. OF ACCOUNTANCY

"A stimulating, thought-pro-
voking, and comprehensive
treatment of accounting prin-
ciples."

M.A.C.A. BULLETIN
\$5.00

*Problems and Practice Sets are available for use
with these books.*

The Macmillan Co., 65 Fifth Ave., N. Y. 11

Publications of Current Interest

Accounting Problems in the Termina-
tion of Government Contracts: Papers
of the 18th Conference of Michigan's Cer-
tified Public Accountants, November, 1943.
pp. 30

W. A. PATON, *Editor*

Current Problems of Business and
Government:

- I. Renegotiation
- II. Termination
- III. Reconversion
- IV. Postwar Markets

The Proceedings of four conferences held
May and June, 1943. pp. 76

E. S. WOLAYER, *Editor*

Marketing under War Conditions: Pro-
ceedings of Midyear Convention, American
Marketing Association, June, 1942. pp. 52

E. H. GAULT, *Editor*

Constructive Banking Cooperation with
Government Financing: Proceedings of
the Michigan Bankers Study Conference,
December, 1941. pp. 67

R. G. RODKEY, *Editor*

The Problem of Retail Site Selection,
by Richard U. Ratcliff, 1939. pp. 93

An analysis of the space relationships among
various types of retail stores, with a con-
sideration of techniques in site selection.

A Method of Isolating Sinusoidal Com-
ponents in Economic Time Series, by
O. W. Blackett and W. P. Willson, 1938.
pp. 58

Price \$1 each, postpaid, paper covers.

Address orders to:

Bureau of Business Research
School of Business Administration
University of Michigan
Ann Arbor, Michigan

The Accounting Review

VOL. XIX

APRIL, 1944

No. 2

ACCOUNTING PRINCIPLES AND THE CURRENT CLASSIFICATION

STEPHEN GILMAN

ONE minor bright spot in the whole tragedy of global war is to be found in the temporary silencing of arguments about accounting principles. Some of these arguments with which we busied ourselves before Pearl Harbor seem now to be comparatively trivial. Obviously, it would require high moral courage to promote a theoretical accounting argument in these days when clients are trigger-tempered and engrossed with grave issues. In time of war we concern ourselves but little with the comparability of profit and loss statements, with technicalities relating to distortion of figures, and similar trivia. The industrialist who faces the certainty of a swollen inventory at the end of the war is in no mood to ponder finespun theories of inventory valuation. Nor does he see any advantage in arguing pro and con as to the theoretical legitimacy of offsetting, when the relationship between his current assets and his current liabilities has become entirely askew from the impact of terrific taxation.

Fortunately for the writer, however, there is one justification for a discussion of accounting principles at this time. That justification is to be found in postwar planning—a most useful phrase which invites us to philosophize in the midst of stark realities.

One of the early postwar tasks to be faced by the accounting profession is that of resuming the search for accounting principles. That this is a "must" item seems apparent upon consideration of the alternative, namely, elimination of the phrase "accepted principles" from the standard form of audit certificate or, even worse, the adoption of some definition of the word "principle" which does not conform to common usage.

DEBATABLE ACCOUNTING PRINCIPLES

Assuming that the search for accounting principles must be continued, it seems worth while to consider briefly a few remaining areas of disagreement which still require exploration and discussion.

Several of these are secondary in importance. For example, some of us do not believe that there are any principles of accounting according to our own understanding of the word "principles," and yet we might be willing to cease arguing on that point if agreement could be reached on more important issues.

One stumbling block in the prewar search for principles was related to coercive legal influence and the extent to which laws or the rulings of regulatory bodies could be said to control accounting principles. In spite of some evidence to the contrary, I

gravely doubt whether any of us has ever really admitted that so-called accounting principles depend on the pronouncements of technically uninformed legislatures or courts. Under forecasted conditions of post-war controls and taxes this particular problem may settle itself by *reductio ad absurdum*. The difficulties of reconciling accounting principles with tax laws and rulings, for example, have already become insurmountable.

The long-continued argument as to whether certain losses and gains should be reported in the profit and loss statement or carried to surplus still remains open for discussion. The current trend seems to favor their inclusion in the profit and loss statement. The combined statement of profit and loss and surplus, which diminishes the importance of the issue, is also becoming more popular; hence we need expect no insuperable difficulty in obtaining a reasonable final settlement of this particular controversy.

PRINCIPLES AFFECTED BY CURRENT CLASSIFICATION

More serious, in my opinion, than any of the matters just referred to is the unfortunate influence of the current asset and current liability classification upon accounting theory and practice. In this area we find a problem which, if not solved, will effectively prevent any satisfactory codification of principles of accounting.

The fundamental difficulty here seems to be one of viewpoint. It relates directly to one controversy which many of us thought had been settled, namely, the relative importance of the balance sheet and the profit and loss statement. Certainly most of us have given lip service at least to the dominance of the profit and loss statement. Official publications of accounting bodies and considered opinions of leading accountants have supported the conclusion that the profit and loss statement is the

primary report and that the balance sheet, to use another's phrase, is but a link between two successive profit and loss statements.

Actions, however, often speak louder than words, and we now find ourselves in the uncomfortable position of having been detected in the simultaneous worship of both God and Mammon. It is suggested that no final agreement as to accounting principles can be obtained until we as accountants decide which is the true god. More specifically, it is suggested that the traditional balance-sheet classification of current assets and current liabilities conflicts with two of our most fundamental profit and loss concepts, namely, the concept of matching costs with revenues and the concept of realization of revenues.

ORIGIN OF CURRENT CLASSIFICATION

In approaching the problem it seems necessary first of all to decide whether the current classification is an accounting classification. It seems to require little more than a superficial study to reach an adverse decision on this point. The current classification is primarily a classification for credit granting, which was popularized to meet the needs of credit men many years ago, at a time when single-entry book-keeping was probably more prevalent than double entry, when there was no well-organized internal accounting worth mentioning, and when the statement of assets and liabilities furnished to creditors consisted substantially of estimates unsupported by anything approaching modern accounting records.

For brevity of discussion we must be content with only a passing reference to the small utility of the current classification to such groups as investors, vendors, and managers in comparison with a large usefulness for the more influential bloc of credit analysts, namely, bank credit men.

In the early days referred to, the granting of credit on the basis of the representations of an applicant involved first of all the identification and measurement of all the applicant's assets which were capable of speedy realization, and the comparison of such values with debts of early maturity, the result being expressed in terms of net working capital or, percentagewise, as a current ratio. Current assets usually, but not necessarily, consisted of (1) cash, (2) receivables, and finally (3) merchandise and other salable inventories.

To the credit grantor, the inventory classification has been particularly troublesome. The value of an inventory, using the word "value" from the peculiar viewpoint of the creditor, was definitely influenced by style factors and by varying degrees of marketability. Credit grantors looked to the accountant for informative help in these two respects but looked in vain, the accountant being neither an appraiser nor an expert in merchandising.

We have almost forgotten how savagely the credit man of the preceding generation scaled down the inventory values reported by a credit applicant. That same credit grantor was a great believer in audits; but he was never able to persuade accountants to report the same kind of realizable or liquidating values that the credit grantor wanted to know about for his ultimate protection in the contingency of customer insolvency.

The cost-or-market rule of inventory valuation, which already had some dubious accounting significance, seemed to offer the best compromise between the viewpoint of the credit grantor and that of the accountant. Possibly from the credit viewpoint the accountant's idea of market values as going values was none too realistic and yet it has usually been satisfactory enough, since credit granting was, and to some extent still is, upon a rule-of-thumb basis. Thus, the arbitrary one-year re-

quirement is a headache-causing hangover from the older days. The two-for-one current ratio was then, and still is, little more than a factor of safety to protect against overvalued inventories.

Credit men, it should be noted, were excellent friends of the accounting profession in its early days. The insistence of credit men upon audited statements contributed mightily to the growth of our profession. It is far from strange, therefore, that the concept of current assets and current liabilities fastened itself upon accounting practice so early and so firmly. And yet, if we take a detached viewpoint toward the current classification we find it faulty in several respects.

FAULTS OF CURRENT CLASSIFICATION

The classification of current assets is bad classification from almost any viewpoint. The total of current assets is not homogeneous, for it is built up of unlike elements and unlike values.

While it has been generally accepted that figures for net working capital or percentages representing current ratios possess significance, such significance has never been satisfactorily proven. In fact, the few studies ever made of this subject seem to indicate that such ratios possess little significance except from the peculiar short-term-liquidation viewpoint of the credit grantor. An important survey made some years ago by the University of Illinois should be disillusioning to those who worship such credit indexes.

Their value has become even less during these recent years of high taxes. Some of our leading corporations are now showing current ratios of less than two-to-one, a phenomenon which results from the inclusion among current liabilities of swollen tax accruals with offsetting cash funds or tax anticipation notes among the current assets—a development of importance in relation to the occasional current-ratio

requirements of some bond indentures.

The most serious accusation, however, which can be leveled at the current classification is that the concept of value rather than that of cost is still inherent therein, a concept which disregards distortion of periodic profit and loss statements.

Time permitting, numerous other accounting complaints against the current classification could be made, particularly with respect to the illogic of including certain kinds of items and excluding certain others.

ACCOUNTING INFLUENCE ON CURRENT CLASSIFICATION

Accountants have not been unaware of complaints against the current classification nor have they been unaware of the need for reconciling this specialized credit concept with general accounting theory. Remedial measures which have been or are being proposed, however, do little to improve the situation from the accounting viewpoint, while at the same time they do much to diminish the credit utility of the current classification. For example, the word "market," as used today in the phrase "cost or market," often has little reference to the market value of interest to the credit man who is wondering what he could realize by dumping a customer's inventory if that necessity should arise. What credit man can truly express a passionate interest in any so-called market value which merely represents replacement cost?

To the accountant it seems logical under certain conditions to exclude an early maturity of a long-term debt from the total of current liabilities. Similarly, it seems logical to eliminate from current assets any cash held in anticipation of purchasing a fixed asset, even though that cash may be free cash and dedicated to its ultimate purpose only by intent. It seems equally logical to exclude receivables arising from the

sale of fixed assets. Finally, there is logic underlying the proposition that inventories in excess of one year's normal requirements should be excluded. These, however, are accounting viewpoints and are influenced by the concept of the going business. They disregard the fact that a good banker is a pessimist who dislikes to admit, even to himself, that a customer's debts will be paid as the normal result of operations and who expects to impound cash from any source or liquidate inventories of any size if the occasion demands.

This seems to be a point worthy of some amplification.

When we listen to credit men talk in public or when we read their technical publications we are apt to get a false impression of credit granting. Such verbal or written evidence tends to mislead us into thinking of the typical credit man as being a kindly soul who is interested primarily in performing a public service and in assisting his customer to grow and prosper. Thus, bank publicity presents a picture of banking in terms of a service to business. While it would be both untrue and unkind to suggest that the banker is not a benevolent man or to imply that he does not hope that the borrower's obligations may be paid as the result of successful operation, nevertheless there is one fundamental concept which absolutely controls every banker who is worth his salt.

That concept refers to the banker's responsibility for his depositors' funds.

He regards himself, quite properly, as occupying a singular position of trust, and when he is in the process of negotiating a loan his sincere desire to render a service to business and to his community is somewhat dwarfed by an even greater desire to insure recovery of the funds he passes out. This is reflected in his eager interest in cash and near-cash assets, and in overhanging liabilities. It is reflected in his coolness toward plant, machinery, and fix-

tures which cannot be quickly converted into money, and his tepid disinterest in the profitability of a customer's operations in which his depositors cannot share.

Long experience with over-optimistic borrowers has caused him to look with some suspicion upon their figures and rosy predictions. It would not be too unjust to say that in the process of negotiating a loan the banker often exhibits a faint trace of skepticism which finds expression in vigorous demands for collateral, including everything from the borrower's life insurance down to his wife's gold teeth.

No real banker is going to surrender good dollars in anticipation of a meager 3 per cent or 4 per cent return until he has satisfied himself that recovery of the funds depends upon something more tangible and more certain than figures, projected operating results, or promises. It is impossible to conceive of any lending transaction in which prayerful consideration is not given to the possible necessity for liquidation of the borrower's affairs through conversion of collateral or forced sale of inventories.

Accordingly, the banker wants to know about the cash value of insurance, about money dedicated to plant expansion, and about all marketable inventories regardless of whether they represent more than a year's normal supply. Quite logically he considers such items as current assets without regard for the borrower's intent or the accountant's rules.

Commendably, the accountant attempts to reconcile the irreconcilable, to justify the current classification as an accounting classification; but, less commendably, he ignores the fundamental fact that his actual or proposed modifications of the current concept rob it of some of its remaining credit value.

And what, in a large way, has been the result?

CREDIT UTILITY OF ACCOUNTANTS' FIGURES

Almost any credit man will admit that he uses the accountant's classification of current assets and current liabilities merely as the beginning of his own personal computation which may involve bringing into the figures certain items such as the cash value of life insurance, which the accountant has omitted, or excluding from the figures certain items, such as inventories of work in process in highly specialized enterprises in which salesmanship is the dominating factor. The credit man's computations may, and often do, involve a substantial scaling down of values, particularly of inventory values in the case of style goods or other items for which there is no broad market capable of absorbing large quantities of goods on forced sale.

Thus, plain white paper in a publisher's inventory may have a credit value far in excess of that same paper after printing. Because of the conventions of cost accounting, we as accountants impute an added value to a publisher's printed inventory. But unless the final product should turn out to be a best seller, like Carnegie's *How to Win Friends and Influence People*, or Willkie's *One World*, the credit man will suspect a lowering in the credit value of that same inventory. White paper, untouched by printer's ink, can be sold and sold quickly under distress conditions. Printed books are notoriously difficult to dispose of at forced sale.

A SUBSTITUTE CLASSIFICATION

It has been suggested that the current classification is not good classification, considered either on its own merits or from the special viewpoint of accounting. A better classification, one which is mutually exclusive and which has accounting authority, is a classification which divides assets into three and only three major divisions: cash,

deferred charges to cash, and deferred charges to revenue.

I hasten to deny any thought that such a classification should be employed in the actual preparation and presentation of balance sheets. If the classification possesses merit it is only the merit of aiding clearer thinking.

It appears that such a classification harmonizes with the modern emphasis upon the profit and loss statement rather than contradicting it as does the current classification. The classification helps to simplify certain problems of matching, both theoretically and practically. It is of special value in relation to the two important categories of receivables and inventories since it is in tune with generally accepted concepts of realization of revenue, emphasizing rather than ignoring the important elements of (1) transfer of title, and (2) the creation of a legal claim to cash. It distinguishes sharply between those assets which are directly or indirectly intended for sale and those assets which result from a sale.

A common example of a deferred charge to cash is the ordinary trade receivable. Characteristic of this particular asset is an assertion which might be questioned by a collection agency but which, for purposes of accounting reasoning, may be considered true, namely, that the transition from a legal claim in the form of a receivable to actual cash itself is, generally speaking, an automatic transition.

While trade receivables represent the most important example of deferred charges to cash, others, such as notes receivable and bonds, deserve mention.

SIMILARITY OF INVENTORIES AND FIXED ASSETS

The proposed asset classification groups inventories with fixed assets as being deferred charges to revenue. Fundamentally, both have the same relationship to revenue

and income. Both represent costs "held over" to be applied against future revenue. Both have the same ultimate effect upon income, hence are logically of the same family; they should be valued consistently on a cost basis and should be matched against revenue according to the same general theory, even if not by the same procedure.

Disregarding sudden obsolescence, spoilage, theft, and similar types of loss, it seems clear that inventories and fixed assets make the same kind of negative contribution to income, a contribution which should be reasoned about on a harmonious and consistent basis.

Flowing from this assumption that the resemblances between inventories and fixed assets are more important accountingwise than the differences, it seems that (1) the cost of a necktie which is sold is not too different from the depreciation of the dealer's showcase, and (2) the allocation of such costs to fiscal periods should be made not only on a strict cost basis but also without being influenced by the probability or improbability that such treatment may result in a net loss in any one accounting period.

This assertion is almost certain to arouse indignant protest. In fact, I am quite sure that I would have little stomach for arguing the point with a war contractor with swollen inventories, who wishes to establish an inventory reserve from his war profits. I am wondering, however, whether such reluctance might not be due to lack of the courage to press such an issue with a man whose emotions are strongly excited, rather than to any lack of conviction. Years ago depreciation was booked on the basis of expediency and the amounts thereof were controlled by the size of profits. In many cases, if there was no profit there would be little or no charge for depreciation. Had it not been for the helpful assistance of the income tax laws we might still

be arguing with clients regarding the propriety of charging off depreciation according to a predetermined plan. But this bridge, fortunately, has been crossed.

We do not, or should not, over-depreciate fixed assets in one year merely because we think that the succeeding year may show a loss. By the same token it is difficult to understand why we should justify, as an accounting principle, the absorption of part of the cost of an inventory prior to its sale because of a similar anticipation of future loss.

It is submitted that we do so in the case of inventories not entirely because we do not recognize the essential similarity between inventories and fixed assets, but because of an overemphasis upon conservatism in relation to inventories that arises merely from the fact that inventories are in the current classification. Such overemphasis leads to the absurd result that a dollar of cost representing a fixed asset and a dollar of cost representing merchandise are applied against revenue according to radically different theories.

MATCHING COSTS WITH REVENUE

Thoughtful accountants have long been disturbed over the contradiction between (1) balance-sheet conservatism, and (2) the fundamental doctrine of matching costs and expenses with revenues.

These men have seen how the balance-sheet conservatism of one period is offset by a lack of profit-and-loss conservatism in a succeeding period. It is suggested that this serious problem is, at least, half solved if balance-sheet conservatism is properly recognized in many cases as being the conservatism of a credit grantor rather than the conservatism of an accountant.

It is further suggested that we can never complete a structure of accepted principles of accounting without basing such principles upon a logical, consistent convention of matching costs with revenues, and fur-

thermore that the matching problem cannot be satisfactorily solved so long as accounting is under the domination of the current classification.

REALIZATION OF REVENUE

Of less practical value perhaps, but still important because any sound body of theory must give effect to extreme cases, is the problem of realization.

Deliberately simplified, the problem may be stated thus: Is revenue realized by the passing of title and the corresponding creation of *any* legal claim to cash, or must such a claim to cash conform to the credit man's idea of a current asset? Eminent authorities have intimated that *liquidity* of a resulting receivable is a necessary prerequisite to the reporting of revenue. Eliminating from present consideration the special treatments permitted in installment sales, long-term contracts, and the like, it seems safe to say that most accountants would regard liquidity of the receivable resulting from a sale as an essential factor in the recognition of realized revenue. And yet it is difficult to see why it would be proper to recognize revenue when the sale resulted, let us say, in a note receivable for 11 months and refrain from doing so if the life of the note was 13 months. The distinction between the two notes is purely a credit distinction based upon the familiar one-year rule of thumb.

In fact, liquidity has been held so important in relation to revenue realization that some authorities have gone so far as to recognize revenue and income as being created by certain transactions which are no more than barter.

BARTER

As an extreme case, consider the merchant who sells a suit of clothes to a customer and for some obscure reason of his own accepts in exchange a share of General Motors stock. Because General Mo-

tors stock is listed and has an active market, it can definitely be characterized as a liquid asset. However, no revenue results from such a transaction, income tax authorities notwithstanding. It is barter pure and simple, hence it is utterly impossible to determine which of the parties thereto is the seller and which the purchaser. Since it has been long recognized that income never can be realized by the act of purchasing, it should be clear that any transaction of the type referred to cannot result in income. And yet we may infer from some of our technical reading that because the General Motors stock is so highly liquid it would be proper to recognize the realization of income in connection with such a transaction, but improper to do so if the suit of clothes had been exchanged for a long-term promissory note.

As justification for spending even a few minutes upon a point which appears to have so little practical value, it may be repeated that at times theory can be tested only by an extreme example. If theory does not stand up under such a test, suspicion is aroused that the theory does not furnish a sound foundation for any superstructure of accounting principles.

CONCLUSION

While we may conclude that the current classification is poor classification, and furthermore that it is not inherently an accounting classification; while we may agree that it has exercised a disturbing influence upon two of the most important accounting fundamentals, namely, the

concept of matching and the concept of realization; nevertheless, we are not left with the undesirable alternative of abandoning it entirely. Such an alternative invites rejection, the current classification having too long been featured in corporate balance sheets. It has been suggested, however, that the current classification may be retained at the same time that its disturbing effect upon profit and loss statements is eliminated.

The use of parenthetical disclosure has previously been mentioned as one method of accomplishing this end. A survey among bank credit men, reported by me in the *Journal of Accountancy* a year or so ago, indicated little opposition to parenthetical disclosure of values other than cost.

It is believed that equally satisfactory results might be obtained by reporting current assets and current liabilities in the form of a schedule accompanying, and reconciled with, the balance sheet. It is likely that such an exhibit might be welcomed by credit grantors and investment analysts, since the items and the values shown in such a schedule could be so presented as to provide the greatest credit utility.

The adoption of such a plan would justify elimination of the current classification on the balance sheet itself, would permit the exercise of sane conservatism consistently applied to all asset items, particularly fixed assets and inventories, and would thereby remove one important cause of distortion in periodic profit and loss statements.

TERMINATION AND RENEGOTIATION

VICTOR H. STEMPP

TERMINATION and renegotiation retain the spotlight of immediate interest. Both affect the stability of industry. Both require careful thought in financial reporting.

The transition from war production to civilian work will require relatively prompt and orderly resumption of peacetime business, to avoid the danger of mass unemployment. War production will not stop abruptly, but it will surely taper off more quickly than civilian production will accelerate. A decline in the production index during the transition seems inevitable.

The prompt settlement of cancelled war contracts, the speedy disposal and conversion of war inventories and facilities, and the equitable determination of genuine retained profits of the war years are all the more vital to the survival of American industry.

WAR CONTRACT TERMINATION

Uniformity of procedures and the fixing of responsibility for the settlement of cancelled war contracts remain major issues between government and industry.

Fundamental Principles

Early in the spring of 1943, the American Institute of Accountants submitted recommendations which still are prophetic of the pattern which settlements will probably follow.

The Institute's Committee on War Contract Termination advocated the settlement of claims by negotiation between contracting officers and contractors, believing that this method should assure quicker settlements than would otherwise be possible.

It fostered a policy of dealing with terminations on the basis of total cost and

reasonable profit, treating as partial payments amounts paid on account of deliveries. It opposed allocation of costs between finished and unfinished portions of cancelled contracts, believing that the difficulties of acceptable apportionment preclude the use of that method in many cases.

The Committee advocated the use of a reasonable rate of profit for the whole contract, after due consideration of the indicated rate for the early stages of the contract.

It urged the allowance of a proper proportion of ordinary going-concern expense, such as institutional advertising, research and development, Federal capital-stock tax, and interest, emphasizing that such expenses are necessary to the continued existence of corporations.

It is obvious that the total allowance to a prime contractor and his subcontractors should not exceed the total of the prime contract. Also, prime and subcontractors have rights and obligations, arising from their relationships, which differ from those between a prime contractor and the government.

Nevertheless, the Committee urged a broad participation by government in the audit of subcontractors because of the many practical business difficulties which would result were that duty placed solely upon prime contractors.

The Committee insisted that the same principles which govern allowable costs should apply to both contractors and subcontractors.

It strongly urged substantial partial payments.

It also urged that prescribed accounting procedures relating to the audit of claims be integrated with general termination procedure.

Government Regulation and Jurisdiction

The WPB Procurement Policy Board recognized in 1942 that the several procurement agencies were developing innumerable and lengthy clauses and regulations to govern contract termination which were creating conflict and inconsistency, and would lead to ultimate chaos. At that time the Administration had not yet determined where final responsibility for termination settlements would rest. Within the several agencies there was a continuous shift in personnel, as well as evidence of dissension between administrative units and personnel. To the WPB Procurement Policy Board, it seems, must be given the credit for initiating a movement to create uniform termination clauses and regulations that could be incorporated by reference in any war contract. Early in July, 1943, the Procurement Policy Board issued a draft of a proposed Standard Termination Article. That accomplishment seems to have blown the starting whistle in a free-for-all scramble among the agencies to grasp the dominant position. That draft stimulated procurement agencies to improve their separate clauses and regulations.

By August, 1943, the War Department's Procurement Regulation 15 and the Termination Accounting Manual were issued; both of these documents were, no doubt, in course of preparation for some time. The Termination Regulation is a product of the Army Service Forces, Termination Branch, Purchases Division, whereas the Accounting Manual was developed by Army Service Forces, Audit Division. In passing, it is obvious that there must be essential agreement and coordination between fiscal and procurement officials if sound termination procedure is to be established.

The philosophy of the Navy in this matter is, no doubt, fundamentally the same as that of the Army. Certainly there is no substantial difference in their concepts of

cost. Their respective problems differ in size only, i.e., the number of contracts and the number of contracting officers. The organization of the Navy is much smaller and, therefore, far more centralized.

In the middle of October, 1943, there was formed an interdepartmental committee on contract termination under the supervision of War Mobilization Director Byrnes. In due course B. M. Baruch was appointed to take charge of a special unit in the Office of War Mobilization to deal with war and postwar adjustment problems, and John M. Hancock, associated with Mr. Baruch in that unit, became chairman of the Joint Contract Termination Board comprising representatives of the several departments.

The Joint Contract Termination Board

On January 8, 1944, the Joint Contract Termination Board, with the approval of Mr. Baruch, issued a directive entitled "Uniform Termination Article for Government Fixed Price War Supply Contracts and Statement of Principles for Determination of Costs Thereunder," copies of which were reproduced by the American Institute of Accountants and distributed promptly. Primarily, it established uniform policy and procedure for the future, and optionally for existing contracts. It is relatively concise and leaves details to be worked out through regulations. The War Department's Procurement Regulation 15 and its Termination Manual continue in effect and have been amended to incorporate the uniform termination article of the Baruch Committee and the accompanying statement of principles for termination of costs thereunder. The directive issued by the Joint Contract Termination Board supports completely the principle of negotiated settlement with full authority vested in contracting officers; it makes partial payments mandatory; and, generally, it is in harmony with the recommendations of the Institute.

As compared with Procurement Regulation 15, the so-called Baruch "Cost Definitions" are generally more liberal; they specifically add the restriction regarding items covered and evidenced in renegotiation. Presumably the Joint Contract Termination Board will issue cost interpretations from time to time as required.

The new Article provides for settlement by formula if negotiation fails. It establishes a limitation of profit to 2 per cent of the cost of raw materials, and an over-all limitation of 6 per cent on the aggregate of raw materials and work in process, adding that "... obviously no profit will be allowed except on work done or costs incurred."

As a guide to the ascertainment of costs, there has been provided the aforementioned Statement of Principles for Determination of Costs. That statement refers to "recognized commercial accounting practices" as the basic standard, thereby emphasizing reliance upon generally accepted accounting methods followed in industry rather than special rules prescribed by government agencies.

Interest on borrowings, previously restricted, is now an admissible cost; whereas costs charged off in a period covered by renegotiation are excluded from the termination settlement if a renegotiation refund was made, or to the extent that such charging off avoided such a refund.

Experimental, research, engineering, development, and advertising costs and expenses are specifically allowed under reasonable limitation, as are also settlement expenses, initial costs, and costs of protection and disposition of property.

Specifically excluded are: (a) losses on other contracts, or from sales or exchange of capital assets; fees and other expenses of reorganization or recapitalization, anti-trust or Federal income tax litigation; losses on investments; provisions for contingencies; and premium on life insurance

if the contractor is the beneficiary; (b) conversion expenses other than those incurred to permit use of facilities for the performance of the contract; reconversion costs are excluded; (c) amounts due to wilful or negligent failure to discontinue the incurring of expenses after termination; (d) costs incurred beyond the requirements of fulfilling the contract; (e) costs related to a renegotiated period, as previously mentioned. The statement concludes with a caution that the fact that any item of cost is not mentioned in the document does not imply that it should be included or excluded.

The General Accounting Office

On September 20, 1943, the Comptroller General requested Congress to confirm the right of the General Accounting Office to approve all termination settlements before they should become final. That question is still not conclusively settled, although strong objection has been voiced by industry and the procurement agencies. As late as Thursday, February 3, 1944, the House Military Affairs Committee voted 13 to 7 to vest final authority over terminations in the procurement agencies, and in so doing denied the request of the Comptroller General. At the annual meeting of the American Institute of Accountants in October, 1943, the Council adopted a resolution opposing such procedure, which was forwarded to all parties at interest in Washington.

Subsequently, the Institute was represented by one of its officers at hearings on this subject before the Murray Committee.

The problems are primarily industrial accounting problems; the legal aspects are essentially those familiar to accountants in industrial transactions; but the penny-snatching, detailed voucher-checking to which the General Accounting Office is accustomed has no place in the termination

tangle, where the major difficulties involve a working knowledge of the application of generally accepted principles of accounting and a reasonable comprehension of the intricacies of cost allocation.

Urgency of Prompt Settlement

Dispatch, with reasonable safeguards, must be the watchword of such settlements; and this is the announced intent of the Joint Termination Board. The background, ability, and foresight of the technical accounting staffs of the Army and the Navy assure a competent, stern, but equitable supervision of termination settlements. Certainly, business realizes the urgent need for speed. The public interest demands that no avoidable impediment be placed in the way of prompt and conclusive settlements.

Administration should remain in the hands of contracting agencies with clear authority to make final and conclusive settlements within the framework of policies established by the Joint Contract Termination Board or any authority which may succeed it. Such settlements should not be subject to intervention by the General Accounting Office except in cases of suspected fraud.

On November 16, Senator George stated that legislation would be drafted to provide a "legal basis" for the new OWM unit, set up under Mr. Baruch.

The Murray-George Bill

There are, in fact, several bills before both houses of Congress which are designed to fix by law the authority to effect termination settlements. It seems that the spearhead of such pending legislation is Senator Murray, Chairman of the Senate Small Business Committee and also Chairman of the War Contract Termination Sub-Committee of the Senate Military Affairs Committee. Senator Murray has said

repeatedly that "... the intelligent solution of the problem is a condition precedent to any orderly reconversion of industry to a peace economy." His Committee on War Contract Termination and Senator George's Postwar Planning Committee are jointly preparing an omnibus contract-termination bill which will undertake to meet all the basic questions. Senator Murray has stated: "It will provide a comprehensive plan for prompt and equitable settlement of all claims arising from terminated war contracts as well as adequate financing during the period between termination and final settlement."

In a speech before the Screw Machine Products Institute in New York on January 28, 1944, Senator Murray outlined the provisions of the bill pending before the House Committee on Military Affairs (S-1718), which may be paraphrased under five general headings:

- (1) It will create a Director of Contract Termination Settlements to coordinate the termination operations of all contracting agencies. He is to promote company settlements, decentralized administration, simple record-keeping and report forms, and training of appropriate personnel both within and without government. He is directed to assist the Smaller War Plants Corporation in protecting smaller contractors. He is to provide for adequate advance notice before termination and for consultation with war contractors through advisory committees. He is to report quarterly to Congress.
- (2) The relations between contracting agencies and the General Accounting Office are to be completely clarified. Contracting agencies are to be given power to negotiate final settlements under policies prescribed by the Director. The General Accounting Office shall examine records for fraud, but may not withhold payments. Such cases must be reported to Congress, the Termination Director, and the Department of Justice. Severe penalties will be provided for misrepresentation or fraud.
- (3) The Bill recognizes the need for continuous Congressional surveillance and provides

that appropriate committees shall fulfill that purpose.

- (4) The Bill will provide for adequate interim financing through partial payments and loans. Mandatory advance payments are provided, not to exceed 90 per cent of claims. The contracting agencies, the Smaller War Plants Corporation, and the RFC are authorized to make or guarantee termination loans. Here, too, penalties are provided for interim financing of excessive claims (in substance involving 12 per cent per annum). Incidentally, contractors are to be allowed interest at 3 per cent per annum on claims allowed, accruing sixty days after filing.
- (5) The Bill will provide for quick and equitable settlements with subcontractors and suppliers (a matter not covered in the present directive issued by the Joint Contract Termination Board).

Senator Murray then discussed some of the provisos concerning subcontractors and suppliers and indicated the following objectives.

- (a) Contracting agencies will be authorized to compute payments on the basis of percentage of completion wherever practicable.
- (b) Fullest advance notice before termination—perhaps 30 days maximum.
- (c) Legal barriers to company settlements are to be swept aside, and agencies will be directed to develop bases for carrying out company settlements to the fullest extent feasible.
- (d) Contracting agencies are to be directed to control payments to prime contractors in such manner as to guarantee payments to subcontractors.
- (e) Subcontractors are to be able to appeal to contracting agencies against decisions of prime contractors.
- (f) Subcontractors are to be protected from bankrupt prime contractors, and against prime contracts cancelled because of default.
- (g) Provision is to be made for authorizing prime contractors to make final settlement with subcontractors without delays involved in government audit.
- (h) Provision is to be made for contracting agencies to settle directly with subcontractors when necessary; entailing perhaps the purchase of the subcontractors' claims.

Disposition of War Inventories and Facilities

In the transition from war to peace, many finely balanced problems of conversion of facilities, materials, and man power will arise which will require coördination, the establishment of an over-all pattern, and administrative machinery to move quickly and in close coöperation with industry.

There is at present no adequate, coördinated machinery to implement the expeditious disposal of facilities and materials. In some cases, cancellations have already impeded continued fabrication, by reason of the "traffic jam" within plants. Photographic evidence of this fact is available, demonstrating the urgency of the problem, which will become more and more pressing as time marches on. A related problem is the disposal of government equipment in private plants.

The decks must be cleared to enable prompt resumption of civilian production. Before the latter can begin, in many cases, facilities for peacetime production must be reinstalled, realigned, tested, and adjusted, to assure smooth operation. Space is needed both for equipment and materials—not new space, but that now occupied by facilities and materials for war production.

Senator George's Postwar Planning Committee is grappling with these problems. In some respects the report issued by this Committee on February 9, 1944, emphasized the serious implications of these problems from both social and economic viewpoints, and in no uncertain terms recommended the return to Congress, at the termination of hostilities, of the vast emergency powers delegated to the Executive Branch of Government during the war emergency. The present situation is serious, if not alarming.

The procurement agencies seem to be taking a definite stand against the physical transfer of materials or products to the

government as an incident of termination; they seem to insist that contractors shall take over or dispose of such materials and products to the end that the agencies may pay for the loss thereby entailed; but no agency seems willing or able to authorize such dispositions.

There is urgent need for prompt legislation to resolve the dilemma.

Principles and Practice

One may speak rather glibly about the principles of termination settlements, but the appalling amount of meticulous detail that underlies the preparation of claims should not be underestimated. There is a decided difference between one small government contract and the other extreme involving literally thousands of contracts, multiplicity of products, and both war and civilian customers. The time required for contractors themselves to prepare accurate claims may well become the greatest single factor in the delay of settlements. Industry must organize its own staffs to assure prompt preparation of claims.

Financial Reporting

In peacetime, cancellations are usually negligible in relation to other components in financial statements. Now they are assuming significant proportions and becoming increasingly substantial in amount.

In the midst of the battle about policies, principles, and jurisdiction over termination settlements, little thought has been given to the disclosure of termination claims in year-old financial statements.

When cancellations occur, there is a definite change in the relationship between contracting parties which requires expression in the accounts. In the normal course of events, work in process becomes finished product and changes into accounts receivable through delivery and billing. However,

upon cancellation of contracts, work in process becomes relatively static as one of the components which measure the right of action against the customer. The real native and extent of that right of action are relevant facts which require disclosure in financial reporting.

The recoverable factors have been described in the foregoing comments dealing with the standard termination articles. How much is the contractor entitled to recover respecting the uncompleted portion of the contract? How should that total claim be expressed in the financial statements, pending consummated settlement?

It is generally recognized that conditions measurable with reasonable approximation should be reflected in the accounts in financial statements.

At the same time, the contractor should avail himself of explanatory notes to describe the circumstances under which the situation arose, its present status, any contingencies which may modify the consummation, and the principles followed in the accounting.

As the feasibility of credible approximation becomes more remote, a less conclusive position may be reflected in actual accounts, coupled with greater reliance upon explanatory notes to point out indeterminable factors.

Working from the foregoing postulates, ordinarily it should be practicable for the contractor to make a representation concerning the total prospective proceeds of pending termination settlements. In fact, he is not in a position to negotiate a settlement until he submits a claim setting forth the aggregate amount to which he believes himself to be entitled.

To the extent that the claim as filed may indicate a loss (by comparison with related book accounts), provision should be made for that loss in the period in which termination occurs.

On the other hand, to the extent that the calculated proceeds of the claim may exceed the aggregate related book amounts, an unrealized gain is indicated, pending negotiated settlement, which, it seems, should be deferred until consummation of the settlement occurs.

In other words, generally accepted accounting principles require provision for all foreseeable costs and losses applicable against current revenues. On the contrary, the fundamental test of profit is realization, in the sense of reduction to cash or a right to demand cash from a solvent debtor. The accounting for income departs from the theory of realization only when realization is so well assured as to justify accrual.

Thus, in the case of coupon interest receivable, income is accrued at interim dates, when collection at coupon date is reasonably assured; but when such securities are in default, accrual ceases, and income is booked only if, as, and when collected.

In the case of termination claims, the cause is just, the amount determinable, and the debtor quadruple A, but the settlement is still to be negotiated. The history of settlements in World War I and thus far in the present war cast sufficient doubt upon ultimate avails to require that the contemplated gain shall be deferred until realized by conclusive settlement.

It seems, therefore, that (1) work-in-process and raw materials accounts should be relieved of charges relating to *termination settlements under negotiation*, by transfer to a current asset account bearing that descriptive title; (2) the account should also include charges for allowable administrative overhead; (3) reasonably allowable profit should also be included. There may be in addition other charges such as unamortized balances of equipment costs, etc., specifically incurred as part of the cost of the contract, as well as subsequent charges for post-termination costs and

costs of settlement. There may be offsetting credits for payments on account.

Administrative overhead is generally treated as a period cost in normal times, and not as a product cost, although it is contractually allowable as a product cost in most war business. For general accounting purposes it should be charged off as a period cost on a consistent basis.

When introduced as an element of the claim, it should be carried to deferred income as a factor of the contemplated gain, if any, upon consummation of the settlement; likewise, the factor of reasonable profit included in the claim should be carried to deferred income.

The foregoing suggestions are offered tentatively for debate. These questions must be resolved in the hope that some degree of uniformity may prevail in the financial reporting of industrial companies. These proposals involve problems in taxation, renegotiation, and corporate policy.

There are collateral questions of minor importance. Should the net result of a concluded settlement be treated as "other operating income" or "other operating deductions," as the case may be? Or should the elements of the settlement be separated as factors of sales and cost of sales? Disclosure is, of course, the essential factor. Is a terminated contract an unfilled order? Should its consummation by negotiated settlement affect gross billings?

It is probably true that in ordinary times cancellation settlements in the regular course of business have been cleared pursuant to established billing routine through sales and cost of sales. The present exceptional significance of large cancellations may warrant careful reconsideration of the subject.

Sales, or gross billings as they are ordinarily called in industrial companies, relate to deliveries to customers of finished products or parts at contractual prices. Termination relates to cancellation of orders,

discontinuance of production, and settlement for unfinished product. It is true that the settlement will probably involve transfer of title to work in process and raw material; there may be some finished parts, but it is more or less incidental that these are "sold" as such.

All circumstances considered, it seems that a termination settlement of the size that is now common is a transaction which differs distinctly from a sale in ordinary course of business, and as such requires separate and specific designation in financial reporting.

Interrelation of Termination and Renegotiation

Price Adjustment Boards seem to assume that they have the right to include termination factors in renegotiation. Probably, as terminations become increasingly significant, these Boards will require separate reporting of these factors in order that the problem may be properly appraised. Obviously, if termination profits are included in renegotiable profits, the base used to compute the percentage of retained profit must be adjusted commensurately. There is some justification, on the other hand, for viewing terminated contracts in the same light as CPFF contracts, and for segregating and excluding them from renegotiable business. However, there are reasonable grounds for assuming that the Price Adjustment Boards calculate the reasonable percentage of retained profits on cost—not on sales—and that the reported percentage of retained profit on sales is merely a translation of results otherwise determined. This being so, it must be to the obvious advantage of contractors, and rightly so, to include the costs of terminated contracts in the aggregate costs of renegotiable business.

RENEGOTIATION OF WAR CONTRACTS

There is no need to review the detailed

provisions of the Renegotiation Act. Most businessmen, and particularly accountants, have had to deal with it. Much has been written on the subject. The amendments introduced in the Revenue Act of 1943 are, however, of immediate interest.

The House Naval Affairs Committee held hearings during June, 1943. Its conclusions were summarized in a report dated October 7, 1943.

The House Ways and Means Committee also held hearings during September and October, 1943. It floundered over its own report, and struck repeated snags in drafting amendments.

Renegotiation met relatively the same fate in the Senate as in the House. The Senate Finance Committee took the subject apart, and for a time it looked as though renegotiation would become a mere shadow of itself; but the Price Adjustment Boards marshalled their forces, and convinced the Senators that approval should be given to policies previously adopted by the Price Adjustment Boards. The compromise effected in the Joint Conference Committee broadly retained the provisions approved by the Administration and threw out those which the Price Adjustment Boards opposed. The most important change is the added measure of protection afforded contractors generally by express provision for court review. The Bill was returned to both Houses on February 7 and was speedily enacted as part of the Revenue Act of 1943.

Present Application

Renegotiation now applies to prime contracts and subcontracts of the War, Navy, and Treasury Departments, the Maritime Commission, the War Shipping Administration, the Defense Plant Corporation, the Metals Reserve Company, the Defense Supplies Corporation, and the Rubber Reserve Company.

New Exemptions

As advocated by the Departments for some time, the floor of renegotiable business has been raised from \$100,000 to \$500,000. Moreover, construction contracts awarded by competitive bids are now exempt.

The status of standard commercial articles, which ran the gamut of divergent views in both Committees, has been settled by affording the Board discretionary authority to exempt contracts and sub-contracts in regard to such articles, if in the opinion of the Board competitive conditions are such as to assure reasonable protection against excessive prices. In addition, such discretion is also authorized to exclude contracts, whether they relate to standard commercial articles or not, if effective competition seems assured, or if the Board believes it impracticable to determine and segregate profits between renegotiable and nonrenegotiable sales. The new exemptions apply to fiscal years ended after June 30, 1943.

Retroactive Amendments

Price Adjustment Boards advocated the exemption of agricultural and dairy products, not beyond the first form or state in which they are customarily sold; but they opposed exemption of such products beyond that stage. Retroactive exemption of these products in the prime stage is provided in the Act effective April 28, 1942, and, as in the case of natural deposits, similar retroactivity is granted respecting the cost allowance (substantially equivalent to the prices at which they are sold in the first form or state) to those who process such products, or timber, or natural deposits, beyond such first form or state.

One other amendment becomes retroactive to April 28, 1942, namely, that which permits a redetermination of accelerated amortization under certificates

of necessity. This is a change which was opposed by the Price Adjustment Boards. The provision does not postpone capture of alleged excessive profits by Price Adjustment Boards in the first instance, but contemplates a subsequent rebate to the contractor of a part of such excessive profits previously paid to the government. The allocation of additional amortization to renegotiated contracts shall be governed by regulations prescribed by the Board, and the amount of recovery to which the contractor may be entitled is defined in phraseology too complex to dissect for the present purpose. Suffice it to say that the principle is recognized and is tied into the ultimate redetermination of accelerated amortization allowed for tax purposes. Any and all closed renegotiations, apparently, are subject to this recomputation and adjustment.

Definition of Excessive Profits

The Act defines excessive profits as:

"the portion of the profits derived from contracts with the Departments and sub-contracts which is determined in accordance with this section to be excessive."

The section then proceeds to specify the guiding standards of efficiency, risk, contribution, etc., which conform in general, with those already prescribed in the joint statement of principles issued by the Departments. Only one of these is new:

"such other factors the consideration of which the public interest and fair and equitable dealing may require, which factors shall be published in regulations of the Board from time to time as adopted."

The history of this item is that it brushes off the important subject of reconversion reserves, which had a checkered career in both the House Ways and Means Committee and the Senate Finance Committee, for purposes of both taxation and renegotiation. The present form agrees with the House measure, which was changed at the

last minute by the Ways and Means Committee. In a prior draft by that Committee the provision read:

"Potential financial burden to reconvert to peacetime operations."

It seems quite certain that the Board will not consider the present form a mandate to allow provisions for reconversion costs. This is a pity, because those costs which reasonably and properly relate to the war years should be provided for in those years in the determination of genuine profits; without such provision, the profits subjected to both taxation and renegotiation are fictional profits. It follows that without such provision, the "take" of the government is confiscatory.

Allowable Deductions

The prior Act required "*recognition of income tax exclusions and deductions.*" A last-minute change in the House reinstated this phraseology in lieu of a provision that would have *required* the computation of profits "in the same manner" as for income tax purposes, including amortization. The new Act overcomes objections to both of the aforementioned phrases by saying that:

"all items *estimated to be allowable* as deductions and exclusions under Chapters 1 and 2E of the Internal Revenue Code (excluding taxes measured by income) shall, to the extent allocable . . . be allowed as items of cost."

It will be recalled that not every item allowed for tax purposes was allowed for renegotiation under the prior Act as administered. There were two modifying terms: "properly applicable" and "of the character." In case items were allowable for tax purposes but were precluded by T. D. 5000, the Boards "recognized" but nevertheless "disallowed" them. Special amortization was "recognized" but wholly or partially "disallowed"; or accelerated depreciation may have been allowed instead.

A "required" computation of profits "in the same manner" as for income tax purposes might have been catastrophic. The Price Adjustment Boards have followed generally recognized accounting principles. Heaven forbid that they should abandon them in favor of abortive tax accounting rules!

As to the present form, one may well wonder as to the significance of the phrase "*estimated to be allowable.*" Yet, to have said "*allowed for tax purposes*" would have posed an enigma as to whether tax returns would have to be audited first; such is obviously not the intent. Clearly the intent is to preclude disallowing for purposes of renegotiation deductions which are clearly allowable taxwise. The regulations of the Board as to this point should be watched with care.

The Act refers to the methods of cost accounting regularly employed by the contractor, but at the same time leaves the gate open for redetermination of methods by the Board or Tax Court. Is the Tax Court going to apply tax accounting rules? It seems that it would have been far more satisfactory to have substituted a specific reference to adherence to generally accepted accounting principles, to have withdrawn all reference to tax exclusions and deductions, and to have made affirmative reference to special amortization pursuant to a certificate of necessity.

War Contract Price Adjustment Board

The present Joint Price Adjustment Board is the creature of mutual agreement among the heads of the Departments to implement uniformity of policy and procedure. The Act now creates the equivalent War Contract Price Adjustment Board, thereby giving existing procedures the authority of law. Instead of five men representing the renegotiating agencies to review decisions of departmental boards, the new Board comprises six, including a representative from WPB, to continue the

functions exercised by the old Board and to make unilateral determinations if necessary.

Tax Court

The soundest criticism of the initial Act has been that it vested in an essentially administrative body the three powers which constitute the bulwark of our form of government. These three pillars were erected to assure appropriate checks and balances among the legislative, administrative, and judicial functions. The separation of these three powers is essential to prevent otherwise indispensable agencies from a usurpation of powers which smacks of an arrogant regimentation from which there is no appeal. These trends of administrative law, under which agencies of the government make the rules, administer them, and then presume to act as prosecutor, judge, and jury, affront American concepts of government. We must devote ourselves to the restoration of our constitutional system of justice under law and adjudication of our rights before duly constituted courts. Strong representations of these concepts won the enactment of the right of appeal from the findings of the Price Adjustment Boards to the Tax Court.

Appeals respecting so-called voluntary agreements are barred; the appeals are limited to unilateral determinations, on the basis of petitions filed within 90 days of such unilateral determinations, or within 150 days of the date when the contractor appeals to the Board if the Board does not act. The proceedings before the Tax Court are not a review of Price Adjustment Board determinations but rather an original trial; and the determination of the Tax Court cannot be reviewed or redetermined by any other court or agency.

Disclosure of Bases of Conclusions

It has been urged for a long time that some way should be found to require full

disclosure of the bases of conclusions in all renegotiation settlements, in order to allay the fears of industry concerning capricious and inequitable findings, and to afford a basis for the correction of alleged abuses. The Naval Affairs Committee adopted this recommendation in its report, with the exception that such publication must not offend censorship restrictions or adversely affect the competitive interests of contractors. The Ways and Means Committee accepted the proposal with some modification. The provision read:

"shall at the request of the contractor or sub-contractor as the case may be, prepare and furnish such contractor or sub-contractor with a statement of such determination; of the facts used as a basis therefor, and of its reasons for such determination."

This provision is now in the Act, including the original House limitation that such statements shall not be admissible evidence in cases before the Tax Court.

Voluntary Agreements

The Act says that, in the absence of express provision to the contrary, any agreement which eliminates excessive profit shall be final and conclusive, except upon a showing of fraud, malfeasance, or wilful misrepresentation. It cannot be modified by any government officer, employee or agent, and it cannot be annulled, modified, cast aside, or disregarded in any suit, action, or proceedings.

Over-all Basis

The Act provides that renegotiation shall be on an over-all basis, unless by mutual agreement to the contrary and at the contractor's request. Price Adjustment Boards have wanted this to be optional to expedite renegotiation of certain types of long-term contracts, profit limitation contracts, and cases in which for any other reason it might be impracticable to use an over-all basis. Obviously, if the contractor concurs as to the impracticability of the

over-all basis, he may accept some mutually agreeable alternative in effecting a voluntary settlement.

Mandatory Filings

Under regulations to be drafted by the Board, all contractors and subcontractors who hold contracts subject to the Act must file financial statements setting forth their actual costs of production and such other data as are prescribed by regulations. Willful noncompliance or false or misleading reports may lead to a fine of not more than \$10,000, or imprisonment for not more than two years, or both. These statements must be filed on or before the first day of the fourth month after the close of the fiscal year.

Audits by Internal Revenue Bureau

It is of particular interest that for purposes of investigation under the Renegotiation Section of the Revenue Act of 1943, the Bureau of Internal Revenue may be injected as auditor on behalf of the Departments. The Act says:

"In the interest of economy and the avoidance of duplication of inspection and audit, the services of the Bureau of Internal Revenue shall, upon request of the Board and the approval of the Secretary of the Treasury, be made available to the extent determined by the Secretary of the Treasury for the purpose of making examinations and audits under this section."

This raises grave questions concerning the fitness of revenue agents to undertake examinations of this type. Their whole training and experience in the Bureau is colored by tax accounting rules; these deviate radically from the generally accepted accounting principles which should govern renegotiation. If tax accounting rules should prevail in renegotiation, what about allowable deductions which are a matter of legislative dispensation in the tax law as opposed to a matter of actual costs incurred pursuant to generally accepted accounting principles? What hap-

pens to the chaotic disparity between generally accepted principles of accrual and the arbitrary legalistic rules of incidence of income? How would the rules concerning transferors' base in tax-free transactions be applied? These examples are typical of the new realm of unrealistic difficulties that might ensue. This is no red herring, but an inevitable consequence if Bureau concepts come into play. At best, competent Price Adjustment Board technicians will find themselves continually subjected to annoyance and altercation as to which philosophy should prevail.

Statute of Limitations

Renegotiation proceedings must be commenced not later than one year after the close of the fiscal year, or one year after mandatory financial data have been filed, whichever is later. It follows that the sooner such data are submitted, the sooner does the statute begin to run. Once the initial proceedings have started, the matter must be closed within one year thereafter, but a timely initial determination by a departmental board or section bars the statute of limitations, and the matter is then subject to the provisions relating to the Price Adjustment Board and the Tax Court.

Expiration of the Act

December 31, 1944, is the expiration date of the Act, but the President may extend it six months or end it earlier; in no even, however, may the Act go beyond the date declared by the President or specified by Congressional resolution as the date of cessation of hostilities.

Repricing of War Contracts (Title VIII—Revenue Act of 1943)

In renegotiation settlements it has probably been the rule rather than the exception to adjust contract prices downward on future deliveries, by agreement with con-

tractors. If the contractor refused, cancellation of orders, take-over of plants, or other actions might ensue; but the contractor could take court action for the reasonable value of services rendered.

The new provisions concerning repricing authorize a mandatory unilateral order, but the contractor may sue in any appropriate court. This new repricing contemplates no exemptions or exclusions like those provided in renegotiation; any and all prime and subcontracts of the specified Departments are susceptible, and the provision applies to prospective as well as existing orders. Suit must be brought within six months of the repricing order. Nonperformance under such orders is a violation of Section 9 of the Selective Training and Service Act of 1940, and subject to all its penalties, including the express power to take immediate possession of plants of violators and to operate them.

As previously stated, some renegotiation settlements have included repricing clauses. In other cases contractors have agreed to eliminate excessive profits which might accumulate in the ensuing year. This is usually eminently fairer than arbitrary forward-pricing revision involving commitments for future periods in which costs may be higher. In any event, the very task of undertaking to amend formally all existing contracts from time to time throughout the year is a hopelessly complex job if many and varied war contracts are involved.

In some cases the objective has been served by issuing to the procurement agency credit memoranda, which become offsets against remittances due from such agencies. Steps should be taken, however, to clear such practices with the Internal Revenue Bureau so that there will be no question concerning appropriate tax benefits.

It is conceivable that a contractor may

so adjust his earnings through the aforementioned procedure as to fit the renegotiation pattern, thereby assuring consistency in interim financial statements and avoiding adjustment at one fell swoop at the year-end.

Appraisal of the Act

Among independent accountants the view persists that the principle of renegotiation is far superior to any expedient of fixed-percentage limitation of profits. Renegotiation affords a basis sufficiently flexible for dealing equitably with the diversity between industries and the variations within them. The fairness of the administration of the Act rests squarely upon the sound application of generally accepted accounting principles. With the exception of a general belief that percentages of retained profits have been driven far too low, the Price Adjustment Boards have done a remarkably competent job predicated soundly upon cold underlying facts and executed unemotionally, sternly, judiciously.

The principle of renegotiation is essentially sound; it should be retained as long as it is needed to curb excessive war profits. Nevertheless, matured experience with problems of war production and experience with the complex relationships of volume, cost, and profit have largely resolved the difficulties which initially justified renegotiation. The procurement of war material at prices based upon predetermined reasonable costs should now be far more feasible, and the need for renegotiation proceedings to recover excessive profits far less urgent than formerly.

Provision for Renegotiation

The problems of a year-end raise questions of how renegotiation should be dealt with in annual financial statements.

Proceedings under renegotiation have

been going on for some time, and many 1942 cases have been completed. Although altered circumstances may change the attitude of Price Adjustment Boards respecting retained profits, contractors themselves are probably best able to discern such changes in their own policies and operations.

Subject to such modifying circumstances, the pattern of renegotiation in the prior year affords a fair picture of the shape of things to come. Therefore, contractors usually have available adequate bases for reasonable estimates of the probable recapture impending, for which actual provision should be made in the accounts.

In the absence of prior experience, renegotiation discussions in the current year with representatives of the Departments, or the experience of contractors in related fields of endeavor, afford some measure of realistic prophecy. These, too, may justify actual provision in the accounts.

If provision cannot be made with any degree of reasonable estimation because of the absence of any pattern or because of greatly changed circumstances, then such facts should be presented in accompanying explanatory notes, with appropriate reference to the current status of the contractor's renegotiation proceedings. The prior year may have had a clearance, but that does not, *per se*, assure clearance in the succeeding year.

Provision for the renegotiation refund should be included in the balance sheet as a current liability, and in the income statement, preferably, as a specific deduction from sales with the related tax computed accordingly. Renegotiation recoveries are considered a price adjustment technique by the Departments, and percentages of retained profits are expressed by them in relation to adjusted sales. The logic of this interpretation is generally conceded.

Because of the interrelation between renegotiation refunds and taxes, many believe that the provision for renegotiation should be made in conjunction with the tax provision, either as separate items or combined. Several fiscal year statements were issued in the latter form in 1943.

If the actual refund is decidedly different from the provision made for the purpose, the correction should appear subsequently as an earned surplus adjustment.

CONCLUSION

In conclusion, let us bear in mind that in both termination and renegotiation the professional accountant may serve very useful purposes. Audit reports of independent certified public accountants, if available, are requested by Price Adjustment Boards in all renegotiation proceedings and many termination proceedings. Such reports lend credence to the financial representations of contractors. Likewise, the professional accountant can render valuable assistance in the orderly and conscientious preparation of data submitted in renegotiation and termination. In all these matters, the professional accountant must maintain his status of unbiased independence, avoiding advocacy, which is fundamentally incompatible with his function as independent certified public accountant.

Obviously, it is imperative that accountants in both private and public practice be thoroughly familiar with requirements relating to renegotiation and termination, and that they should clearly comprehend their own responsibility therein. If those in public practice lend their names to these matters, they may rightly express professional opinions, but these must be informed opinions based upon objective standards devoid of advocacy, the presence of which may justify conclusions of nonindependence.

APTITUDE TESTS FOR ACCOUNTING STUDENTS

BEN BLOOM

IN THE attempt to place men where they fit best, the Army has made extensive use of aptitude testing. Since the kinds of questions that need answers in connection with placement problems are much alike in all employment settings, a brief discussion of Army procedure will afford an introduction to some suggestions on testing for accounting aptitude.

Joe Smith finds many strange things when he arrives at the Army Reception Center, but few more confusing than the Army Classification Test. Getting fitted for a uniform, eating in a large mess hall, the many "shots" he must take, and the new Army words all serve to bewilder him; but the Classification Test contributes more than its share of bewilderment to each neophyte soldier.

He is marched to a big hall and assigned a seat and desk so designed that he can't see what his neighbor is doing. He is given a special pencil, a test booklet, and an answer sheet. The officer in charge explains how he is to go about marking the answer sheet and demonstrates how a few sample questions should be answered. The officer then takes a stop watch in hand and tells the group to begin answering the questions in the test.

Smith groans as he tries to figure how many days it will take two men to dig a ditch if five men can dig it in nine days. As he figures the answer he thinks, "Why don't they use a steam shovel?" Then he is confronted with a difficult word for which he must select another with the same or opposite meaning. "I never used that word before," he mutters, "Why should I be expected to know it now? Anyway, I haven't yet learned the meaning of a lot

of army words like 'shave tail', 'chow', 'top kick', brass 'hat', and 'GI'." As he proceeds with the test he comes to exercises in which he must count the number of blocks in a picture. "Back to my second childhood," he thinks.

To Joe Smith, the Army Classification Test with its queer and apparently useless questions is a far cry from the job of being a good soldier. He also has difficulty in seeing the relationship between such a thing as the Mechanical Aptitude Test and the work of a soldier. Joe is dimly aware that people differ in the ability to learn new things and that some people are more skilled in various tasks than others. However, he does not tie these facts up with the tremendous problems involved in the placement of men in the Army.

The Army has the problem of placing each man in the job for which he is best fitted. This is important in any field if the job is to be properly performed and if each man is to do his best. It is especially important in the Army organization, in which the things each one does can vitally affect the others in his group and, in truth, the entire Army. Select a man who cannot lead and make him an officer—his men will not be good followers. Place a good mechanic in the kitchen—the Army loses a good mechanic, gains a poor cook, and several hundred men must eat poorly prepared food.

If a specific Army job is the same as a civilian job, and if soldiers are available who have the specific experience required, the placement job of the Army is relatively simple. However, there are many Army jobs for which there are no civilian equivalents—bombardier, machine gunner, range

finder operator, etc. There are many other jobs which have civilian equivalents but for which the number of available men is insufficient. Men must be prepared for these jobs by training which may take a few weeks or many months. It would be extremely wasteful in time and in quality of the final product to select the wrong man for a particular course of training.

For each job and for each type of training men must be selected who have the proper combination of abilities, skills, interests, and personality characteristics. The classification officer who makes the decisions must utilize information about each man's past experience and education, the impressions derived from a personal interview, and the results of tests administered to the incoming soldiers. This officer relies on the Army General Classification Test for determining the man's general aptness for learning, since the different parts of this test were constructed because test-makers have found these types of questions to be good indices of a man's ability to comprehend orders, directions, requests, and explanations. The classification officer makes use of the Mechanical Aptitude Test to select men who have some facility in handling and assembling mechanical parts and instruments. In case a need exists, more specific tests are used—finger dexterity, ability to discriminate sounds, accuracy in clerical operations, etc.

The problem which now confronts the Army with pressing urgency always faces each educational institution and each employer. Human beings vary not only in height, weight, and appearance, but also in speed and accuracy of different types of response, comprehension of the written and the spoken word, quality of thinking—in fact, in almost every human characteristic or attribute. In so far as variation may affect the speed and quality of learning or the speed and quality of work, the

educational institution or business enterprise is not certain of operating efficiently unless it selects trainees and employees on the basis of certain requisite characteristics.

Not every person can become anything he desires. Nor should he strive for something which is unattainable. In the professions, an incompetent person can injure not only himself but also a great many others with whom he deals. Thus, the incompetent who manages to become a physician is actually a menace to the community in which he works. The public accountant who is incompetent may do much harm to the business organizations with which he works, or to the investor who relies upon his certificate.

This then is a major problem for an educational institution that provides specialized training—that of admitting only persons who are or will be competent in the field of specialization for which they are to be trained, and of eliminating those who demonstrate that they will not be competent in the field of specialization they select. This the institution must do, first, to protect the community from the services of incompetents; second, to train competents thoroughly without being encumbered by incompetents; and third, to protect the incompetent from unnecessary failure in a task which he never should be expected to perform. The incompetent in one field may be quite successful in another field. Much the same could be said about personnel problems in business enterprises and firms of professional men.

The selection of competents and the elimination of incompetents is a difficult task. It involves a definition of competence in terms of characteristics which have some degree of permanency. It involves the development of a method of securing evidence as to whether a person possesses these characteristics. Finally, it involves a decision based upon all the available evidence.

One type of evidence which is objective, economical, and of high quality, if the proper safeguards are taken, is that furnished by tests of aptitude. Aptitude tests may be divided into two types. One type constitutes a miniature job-trial under standardized conditions. This type is well illustrated by typing tests, in which the candidate for a position is given a representative typing job to do and the results are carefully evaluated in terms of criteria set up in advance. This type of test is most appropriate if the individual has had some training in the field and if a combination of present achievement and aptitude is desired. An analogous but more costly approach is one in which the individual is given a trial for several weeks on the job before a decision is made about his permanent employment. This may be illustrated by educational institutions in which entrants are placed on probation for a semester or a quarter before being granted full privileges as students.

Another type of aptitude test is one in which the individual is given a number of specific tasks to do under standardized conditions, tasks which have no apparent relation to the work required on the job or to the educational program, but which have been found to possess high predictive value. An example of this is the counting of blocks in a picture which is part of the Army Classification Test. This test has predictive value in determining quickness and general quality of mental response; yet very seldom does an adult perform such block-counting tasks in other than test situations. Children are the only ones who have much to do with blocks.

Aptitude tests can provide one type of evidence to be used in selecting persons who should be successful in the field of accounting. What has been said about the elimination of incompetents clearly applies to this field. As increasing opportunities for accountants arise, the number of people

interested in receiving the necessary training increases. Those who are unlikely to meet requisite standards should be recognized as early in their specialized training as possible. Schools which offer training in accounting should attempt to weed out the incompetents at the time of entrance, if possible. This can be done by collecting types of evidence about the relevant aspects of the person's background and his abilities. The value of various types of evidence used in a selective process can be determined through an experimental program in which a number of significant items of information about the student and his abilities can be collected. The writer suggests that the following items be tried out experimentally as possible indicators of aptitude for accounting:

1. The facility with which the person can learn new things.

It seems a reasonable hypothesis that one who can learn new things quickly and thoroughly will make a better accounting student than one who cannot. Evidence on this point might be obtained from two sources: (a) his previous record of learning as revealed by his school grades and relative standing in his class; and (b) his present facility in meeting new learning situations as shown by a general scholastic aptitude test. Since much learning involves manipulation of verbal and non-verbal symbols, tests of scholastic aptitude usually contain exercises that require precise understanding of words, as well as exercises that require manipulation and understanding of numerical and symbolic relationships.

2. The facility with which the person can communicate with others.

It seems a reasonable hypothesis that one who can communicate well with others will make a better accounting student than one who cannot. Evidence on this point might be obtained from several sources: (a) the person's skill in compre-

hending the written word, as revealed by a test of reading comprehension, preferably sampling the situations which an accountant or accounting student must face; (b) his skill in expressing his ideas in written form, as revealed by a test of writing, preferably sampling the writing situations which an accountant or accounting student may expect; and (c) his skill in comprehending and remembering the spoken word, as well as his facility in expressing his ideas to others by means of the spoken word, as revealed by tests and rating scales involving this type of behavior.

3. The facility with which the person can manipulate numbers.

Because of the importance of numbers in the work of the accountant, it seems reasonable to expect that a student who is skillful in the manipulation of numbers will make a better accounting student than one who lacks this skill. Evidence on this point might be obtained from: (a) his previous record of number manipulation as revealed by his performance in mathematics courses; and (b) his present skill in this area as revealed by a test involving the mathematical skills needed by the accounting student. The section of the scholastic aptitude test which involves manipulation of non-verbal symbols should furnish corroborative evidence on this point.

4. The accuracy with which the person performs various tasks.

The emphasis on accuracy in the work of the accountant suggests that one who is consistently accurate in his work will make a better accounting student than one who

is not. Evidence on this point might be obtained from all the tests so far suggested. In addition, evidence about the person's accuracy in simple clerical situations might prove significant. Such evidence might be secured from a test of clerical accuracy involving such tasks as copying and comparing lists of figures, words, and symbols.

5. The interest the person has in the work of the accountant.

It seems a reasonable hypothesis that one who is well motivated with respect to this field of specialization will make a better student than one who is not. Evidence on this point might be obtained from: (a) the activities in which the person has been interested in the past as revealed by a record of the school courses he elected to take, the jobs he has held, and the activities in which he has engaged; and (b) the activities in which he is now interested as revealed by an inventory of his present interests, especially as they relate to the field of accounting.

No doubt there are other items that should be tried out as possible indicators of aptitude, but the foregoing ones are illustrative. A comprehensive selective program might also include the collection of evidence about the person's reasons for selecting this field of specialization, the kind of social values he cherishes, his sensitivity to the problems of others, his personality characteristics, and his life goals. The experience of other professions suggests that the potential contributions of a selective program involving the testing of aptitudes are so great as to justify thoroughgoing experimentation.

OBSERVATIONS OF A CPA EXAMINER

JOHN F. FORBES

THE LATE Durand Springer had a greater fund of miscellaneous information about accountants than any other man I ever talked to. Upon one of his occasional visits at my office in San Francisco, he volunteered the information that the period of my service as a member of a state board of accountancy exceeded that of any other surviving board member. This was most surprising to me, and the following is an attempt to describe briefly how this came about and to set down some thoughts which are the result of experience of over a third of a century as a CPA examiner.

Somewhere between thirty-five and forty years ago, Dr. Henry Rand Hatfield and I, after most mature deliberation, definitely acquiesced in the ancient truism that no profession can be any greater than the personnel of whom it is composed. We agreed further that if the accounting profession in California was going to amount to anything, someone had to take the matter in hand, and we appointed ourselves an unofficial committee of two to do something about it.

We had a perfectly good law, but our standards were terrible, because our state board—which was originally an excellent one—had degenerated into a band of politicians, some of whom were frankly dishonest. For instance, the secretary offered for a hundred dollars a course in accounting, which guaranteed a CPA certificate. None, so far as I know, availed themselves of this unnecessary privilege, for it was just as easy—and much cheaper—for the prospective candidate to remain honest. Simply taking the examination was tantamount to passing it. As Greendlinger said on page 288 of the 1908 edition of his *Accounting Problems*—

"A comparison of the California paper with the examination papers of some of the other states, such as Pennsylvania and New York, will reveal the comparatively low standard maintained by the California State Board. The questions in theory of accounts have been repeated over and over again practically by all American and foreign examining bodies, so that one who reads only the accounting manuals and magazines ought to be able to answer them without the slightest exertion. The same remarks are true of the paper in Commercial Law. While the Auditing paper seems to disclose a little more care, the paper in Practical Accounting does not require any intelligence out of the ordinary, especially as an hour's time is allotted to each problem."

The profession at that time was centered in San Francisco (there were only half a dozen practicing CPA's in Los Angeles), and was split into two factions, which quarreled like children. Thus there was quite a job to be done, but a few of us got together and consolidated the two societies, cleaned up the state board of accountancy, and helped to develop the accounting courses at the University of California. About this time, Dr. Hatfield published his *Modern Accounting*, which proved to be an enormous stimulant to students; and, when the horizon gradually cleared, I found myself a member of the faculty at the University, where I lectured for over thirty years; secretary-treasurer of the State Society, which Office I retained some eighteen years, or until we could afford a paid secretary; and a member of the state board of accountancy, which office I have held for nearly thirty-five years.

Incidentally, the State Society, which we organized with thirty-six members (eleven of whom are still living and, with two exceptions, still practicing), now has over 860 members, of whom over 480 belong to the Los Angeles Chapter. The character of the personnel of the profession

in California, which has furnished three presidents to the Institute, needs no encomium here.

The only excuse for the existence of a state board of accountancy is the protection of the public. It is to protect the public that we set high standards of character and technical knowledge and ability. It is to protect the public that we scrutinize so carefully the credentials of the applicants for reciprocity certificates, and it is to protect the public that we enforce certain rules of discipline. Members of the profession find it very difficult to understand why we do not take action against the infringement of certain rules of ethics, but the fact is that the state which we represent is not at all interested in good manners, and many actions which we should like to take are foregone because we know that the courts would not sustain them.

The most important thing that a member of a state board has to have in mind is the public. Second in importance as a matter of state board concern is the person who happens to be an applicant for a CPA certificate. He has certain rights which cannot be infringed upon with impunity, and these rights may be summarized generally in the expression "a fair deal." The applicant must receive a fair deal, both before he becomes a CPA and after. Anyone who conforms to the general requirements may become an applicant. We cannot discriminate, desirable as it sometimes may seem to be, between persons who may qualify; we have to give them all a fair examination under fair conditions. Once an applicant receives his certificate and keeps his renewal fees paid, if the state laws require them, he is beyond our control unless he commits some offense which is equivalent to a felony. Generally speaking, the courts will not tolerate the arbitrary taking away of the means of anyone's livelihood, and a CPA certificate certainly possesses that characteristic.

Next in order of importance is the profession, but any consideration which the board may give to the profession is incidental to its main function; however, this lack of consideration of the profession is compensated for by the protection which the law gives to the CPA.

In Great Britain and her dependencies, the Institutes of Chartered Accountants, and similar societies, are organized to promote and control the profession, and with them, naturally, the profession holds the first place of interest. But the chartered accountant holds no certificate from the state. There are any number of accounting organizations which claim to possess as high standards as those of the Institutes, and they may assert this fact to the public in a manner which would be illegal in many of the states of this country if applied to the CPA.

I do not mean to imply that under British law British professional accountants receive no protection, for indeed that is not the case, but they go about it in a way different from ours. For instance, I remember very clearly a pilgrimage which the former secretary of the Institute, Mr. A. P. Richardson, and I took to the British Crown Colony of Hong Kong in an attempt to have properly qualified American accountants permitted to practice there under the rules prescribed by the Companies Act of that Colony. With some difficulty we persuaded the authorities to accept the certificate of CPA's, which they did, but with the reservation that the CPA's must be members of the American Institute of Accountants. Then, too, you are doubtless aware that we cannot send accountants on professional errands into Canada, notwithstanding the fact that all British accountants may come freely into the United States upon professional business.

As you know, the laws of the states regulate the CPA within their respective

boundaries, just as they do other professions such as medicine, law, dentistry, architecture, etc.; but so far as I am aware ours is the only profession which has what is to all intents and purposes a uniform examination throughout the United States.

Perhaps the most fortunate thing that has happened for the profession occurred when in 1916 the American Institute decided, following the example of the British Institutes, to prepare its own examination for admission to membership. Immediately thereupon, a few of us who happened to be members of state boards of accountancy realized the great possibility of this uniform examination, and we proceeded to work out a plan whereby this examination could be given by state boards as well as by the Institute at a certain fixed time twice a year. All sorts of compromises had to be made in the initial stages of the plan, and there was finally evolved the general examination structure as we find it today, but with this difference: as originally planned, the Institute's examination was for its own members; as operated today, most of those who take the examination are not directly aspiring to membership in the Institute, but to the CPA degree, though most of those who pass do eventually join the Institute. One of the results of the present set-up is to create a degree of uniformity which greatly facilitates the granting of reciprocity certificates.

A few states by reason of their laws cannot avail themselves of the privilege which the Institute offers—and believe me, it is a privilege. I remember very clearly when I used to have to devote about eighty hours every six months to the preparation and marking of CPA examinations. If this work is done by the Institute, it saves the individual state board member an immense amount of drudgery and permits of the preparation of a much superior examination. If the grading can be done by the Institute, so much the better.

In California, our attorney has held that the board through its own employees must grade its own papers; for years the papers were graded thus as well as by the Institute. Of course, the grading would not be uniform, and occasionally a candidate would be given a passing mark for admission into the Institute and a failing mark for the CPA certificate. The difficulty of reconciling these markings was very great; hence, when the rules of the Institute permitted the acceptance of the markings of CPA examiners, we omitted the Institute's grading and thereby eliminated a great cause of contention. But we wish we could utilize the Institute's markings.

One of the important matters subject to compromise was the length and nature of the examinations. In California we used three full days, whereas the Institute insisted that two days were sufficient. In California, we gave a separate examination in theory of accounts. In the Institute, this subject until recently was consolidated with practical accounting. But within the past year this has been changed. Theory of accounts has been reinstated as a subject and the examination has been extended to two and one-half days. Considering the immensity of accountancy, I still think the CPA examination is not yet sufficiently exhaustive; but I am satisfied that we are making progress.

There are certain questions that every state board must consider and finally decide for itself because policies that appear to operate satisfactorily in one locality do not necessarily do so elsewhere. We in California permit anyone who otherwise qualifies to take the examination whether he has had experience or not. The reason for this is that formerly many university students who had majored in accounting and entered practice found that by the time they had acquired the prescribed experience, they had forgotten what they had learned in the university. They felt

that had they been permitted to take the examination immediately upon their graduation they could have passed. As a result, we have granted this privilege, with the provision that the experience required by our rules shall be made up before the candidates receive their certificates. This rule has been in operation a great many years and we have never had a single reason to regret it.

What has always seemed to me to be most troublesome is the tinkering with the CPA law by those who do not have the faintest idea of the difficulties of administering it, as well as no understanding as to what constitutes good law. In California, anyone may practice as a public accountant, and those of us who have given the matter most thought feel that this condition is an altogether desirable one. For the reason that California has been growing very rapidly during the last half century, accountants have been coming here in droves, and at times in order to make a living they have worked on the accounts of several employers at the same time. Then they are public accountants. When something good in the form of permanent employment appears, they take advantage of it. After they close up shop they are succeeded by others. A study of the directories reveals the fact that few of these men practice for any great length of time. It would be an impossible job for us to police the profession and keep these people out of practice, even if it were desirable. In my entire professional experience I have known of only half a dozen instances in which they were injurious to the public; and these instances were relatively unimportant.

On the other hand, our law has been operating for more than forty years, and practically every businessman is familiar with the services rendered by the CPA and understands that no one can take his place.

About every five years, a group of these

public accountants, inspired by one or two very active ones, strives to have some form of legislation passed which will have the effect, broadly speaking, of opening the waiver for them. Indeed, that thought is behind all two-class accounting legislation. One of these bills came to a vote in the lower house in the latest session of our legislature, but was so overwhelmingly defeated that I question whether any legislator will introduce a similar measure for a long time. That particular bill could not be killed in committee because it had the active support of certain state politicians and a few members of the House. But when it appeared upon the floor and its nature became apparent, it was handsomely beaten. This is the only instance that I recall in which this sort of bill got out of committee.

Perhaps the one subject upon which state boards of accountancy have been most severely criticized is the small percentage of those sitting who pass the examinations. In California from 1906 to 1942 inclusive, 6,151 persons took the examinations and 1,276 passed, or 20.7 per cent. These figures, of course, are subject to all sorts of qualifications because a great number of the applicants are conditioned, some go up half a dozen times and never do pass, and some quit at the end of the first day and never appear again.

All these occurrences have the effect of lowering the percentage which receives passing grades. But even taking the best view of the subject, the proportion of those applicants who pass is lower in the CPA examinations than in the examinations given by the medical, dental, and legal boards. The reason for this is that certain definite advanced schooling is required for these other professions, whereas no educational qualifications beyond the high school are required in the great majority of states. The result is that a large number of people take the CPA examina-

tions whose experience has been very narrow and who have no satisfactory educational background.

People generally do not realize that the profession as now carried on involves a knowledge of economics, mathematics, and law, as well as a profound knowledge of accounting. And this omits any considera-

tion of the thousand and one other subjects of importance to public accountants such as the regulations covering taxation, wage and hour matters, man power, social security matters, security exchange matters, and so on. The only wonder is that as large a percentage as 20.7 succeeds in getting through the examinations.

THE DEVELOPMENT OF UNIFORM EXAMINATIONS

HENRY E. MENDES

IT WAS with mingled pride and humility that I accepted the invitation to speak to the Association of CPA Examiners. My sense of pride was engendered by the fact that I would be speaking as chairman of the Institute's Board of Examiners. My humility arises out of two facts, first, a realization that the Institute's board was admitted to membership in the Association by waiver of examination; and, second, a realization that there is still much to be done through the coöperative effort of the Institute's board and the Association to maintain and further the high standard for the CPA certificate that has been developed over the years.

The by-laws of the American Institute of Accountants set forth as one of the prime purposes of the national professional body the promotion and maintenance of high professional standards. In the furtherance of this purpose the board of examiners has had a prominent role, and at this time I aim to cover briefly the contribution made by the Institute's board in coöperation with state boards of accountancy in developing and maintaining an examination standard which has contributed in large measure to the present stature of the profession in this country.

The first board of examiners of the American Institute of Accountants was elected by the Council in 1916, and in the same year met and adopted rules and regulations relating to the admission requirements for membership in the Institute. In June, 1917, the first examination of public accountants on a national scale was conducted.

By that year, all but four states had enacted C.P.A. laws. There was, however, wide diversity in the laws of the various states, both in language and in administration. In some states there was an insufficient number of well-qualified certified public accountants to make up the membership of the necessary state accountancy boards. The need for uniformity was recognized by the Institute, and its board of examiners offered to coöperate with the state boards in developing a uniform examination. Three states, New Hampshire, Kansas, and Oregon, used the Institute's examination in June, 1917. Nine states subscribed to the examination in November, 1917, and within two years thereafter more than half of the states availed themselves of the standard examinations.

It will be recalled, I may say in passing, that Missouri was one of the first states

to subscribe to the standard examinations and, if my memory does not fail me, it was while I was a member of the Missouri board in 1918 that the Institute's examination was used for the first time in that state.

Thus, the Institute's standard examination early assumed a dual role—that of an admissions examination for the Institute and that of a uniform examination for the testing of candidates for state CPA certificates. Because of the uniform standard maintained throughout the country for the CPA certificate, and because possession of a CPA certificate is a prerequisite for admission to the Institute, there are relatively few occasions today when the board serves as an examining board for admissions to membership in the Institute.

The first report of the board of examiners in 1917 stated, "It is the purpose of the board to prepare questions, clear, concise, and altogether free from ambiguity." This has been the objective of succeeding boards. The uniform examination has always been gauged to test the experience of public accountants. The examination questions were developed from the files of practitioners, and the candidates therefore, faced in the examination subject matter that was fresh from the firing line. Incidentally, this condition still prevails to a large extent. Very few candidates, it may be safely said, have had need to complain that the examination questions lacked originality.

It is interesting to find in a report of the board in 1918 the statement, "The examination questions for both the November, 1917, and May, 1918, examinations were prepared by members of the board. This method will not necessarily be adopted in the future but for the year now ended it was found practicable and resulted in a considerable financial saving." Although at that time the board hoped that the day might come when it would not find itself

so intimately concerned with the preparation of the standard examination, the fact is that it has never divorced itself from much of the hard work of preparing and presenting a set of uniform examination papers. It has undoubtedly been to the best interest of the profession that time and care were devoted to the examination by outstanding members of the Institute elected by its Council to constitute the board of examiners.

Requests for examination problem material made to state boards of accountancy, committee chairmen, and others apparently never brought heavy response. The material submitted, however, was generally of excellent quality and of great assistance to the board in drafting the examination papers. In the light of our present manpower shortage and current difficulties in bringing together the entire board of examiners to work on the examination papers, it is interesting to learn that in 1918 four members of the board were in Europe. In its report to the Council in 1919, the board suggested that . . . "before the election of new members of the board careful inquiry be made as to whether or not they will undertake to attend to the duties of the board."

It seems a safe assumption that widespread adoption of the uniform examination accelerated early national recognition of the CPA certificate. Certified public accountants, as well as lawyers, were permitted to enroll to practice before the Treasury without further examination. The Securities and Exchange Commission, the stock exchanges, banking groups, and others have recognized the CPA certificate on a national basis.

With the establishment of a uniform standard throughout the country, reciprocity among the state boards of accountancy was facilitated. Without this reciprocity, state barriers might have been built up and the interstate practice of the

profession in serving business and industry on a national basis might have been seriously impeded, or even made impossible.

No profession I can think of other than accountancy has developed a uniform examination for testing professional men that has been adopted by a majority of the legally constituted authorities of the various states. But other professions are interested. In October, 1932, Elmer L. Hatter, then chairman of the Institute's Board of Examiners, was invited to deliver an address upon the uniform accounting examination before the National Conference of Bar Examiners in Washington, D. C.

The importance of the Institute's examination to academic people must also be noted. The examination was looked upon as representing standards which the profession required of practitioners and therefore as providing useful teaching materials. Examination questions were often reproduced in textbooks, and thus found their way into use in the courses of many schools that give accounting instruction. In 1921, the examination questions from 1917 to 1921 were published in book form.

The Committee on Practice of the Treasury Department (formerly known as the Committee on Enrollment and Disbarment) since 1940 has used the standard Accounting Theory and Practice examination in examining candidates other than members of the bar and CPA's who wish to enroll for practice before the Bureau of Internal Revenue. This procedure was adopted by the Treasury for the very good reason that its practice requirements should be held at the level established and maintained by the professions.

The Institute's standard examination has over the years served to maintain standards of practice in states whose accountancy laws are inadequate. The standard has been set to test candidates at the level of senior accountants and those

with poor academic background and weak experience qualifications have been weeded out. This circumstance has undoubtedly subjected the standard examination to severe criticism in some states where the percentage of failures seems high when compared with the results of other professional examinations. The maintenance of a high standard, however, should in the long run make it easier for states to bolster weak spots in their accountancy laws.

From the outset the board recognized that maintenance of a uniform standard involved not only use of standard examination questions but also uniform standards of grading. Although cooperating state boards of accountancy which used the Institute's standard examination were not required to use its grading service, a candidate who sat for the examination before a state board of accountancy and wished to have the same examination considered as a fulfillment of the admission requirements of the Institute was required to have his papers sent to the Institute's board of examiners for review.

The Institute's boards of examiners have at all times been fully aware of the limitations necessarily imposed in setting written examinations, and in recent years, particularly in the past year or two, not a few suggestions have come from leaders in the profession, and also from educators, to the effect that other means, such as aptitude tests, be adopted in addition to examination, to determine the right of a candidate to obtain the CPA certificate. This, of course, is a big question and it is not my purpose to discuss it here. Suffice it to say that the subject is now under study by a special committee of the Institute appointed expressly for that purpose.

The uniform examination service has always been conducted at a cost to the Institute. The public practitioners, members of the Institute, who constitute the examining staff, are compensated at a rate

of \$30 per diem. Last year the revenue from state boards which used the Institute's examination was \$11,200. The cost of preparation, grading, and supplies was \$15,068.

It should be noted that this latter figure is the direct cost only, since it does not include any provision for that part of the time and energy of the Institute's general office staff which is devoted to the examinations, a proportion which, you may be assured, is not inconsequential.

Fortunately, the development and maintenance of the uniform examination, which is now used by 47 state and territorial boards of accountancy, was always in the hands of leaders of the accounting profession, who gave unstintingly of their time and talent. In calling the roll of the first board of examiners, we find such well-known accounting leaders as: Arthur W. Teele, Chairman, Frank G. DuBois, Arthur Young, W. P. Hilton, B. D. Kribben, W. D. Whitcomb, Leonard H. Conant, George O. May, H. Ivor Thomas.

Successive chairmen of the board were as follows: John B. Niven, A. S. Fedde, Charles B. Couchman, Elmer L. Hatter, Maurice E. Peloubet, John H. Zebley, Jr.

As we look to the future—or possibly I should use current language and say “in our postwar planning”—it is worth while to glance back at times to discover how well and with what pains members of the profession who came before us in this country have built professional accounting standards. We have a fine heritage in spite of the youth of our profession. The national professional body has made possible a uniform standard which has gained national recognition. The Institute constitutes the one national accounting body of certified public accountants; and co-operating with it is the Association of Certified Public Accountant Examiners, representing the entire membership of every state accountancy board. Under these conditions maintenance of a high standard for the CPA certificate is assured.

SOME EARLY ACCOUNTANCY EXAMINERS

NORMAN E. WEBSTER

AS AN indication of time, “early” will not mean the same to all of us. The first Certified Public Accountant examination was given in December, 1896. By the end of 1901 examinations were given in four states. In the next four years 1902–1905, they were given in five more; in the next five years 1906–1910, in thirteen more; and in the next five years 1911–1915, eighteen more; making forty states by the end of 1915. By 1925 these examinations were being given in all the states, territories, and insular possessions.

But these were not the earliest accountancy examinations given in the United States. The Institute of Accounts, organized in 1882, had examiners almost from its beginning. But since its records have been lost and only a very few of its examiners are known, this study has been confined to those who conducted examinations for Certified Public Accountants.

The information available indicates that in the 47 years from 1896 there have been issued in all states about 32,600 certificates, of which about 1,600 were issued

upon waiver of examination, perhaps 3,000 upon recognition of certificates issued by other jurisdictions, and 28,000 upon examination, the great majority upon written examination.

In the ten years from 1896 to 1905, seven of the first nine states had issued 644 certificates, largely, of course—and properly, in my opinion—upon waiver of examination. In that period the examiners in those states had decided upon the subjects and scope of their examinations, and in each state they had prepared, given, and rated from one to twenty examinations. Quite likely their bases for ratings differed, but they were in complete agreement upon the scope of the tests. In those first ten years all examinations were in four subjects, Commercial Law, Theory of Accounts, Practical Accounting, and Auditing. Later some states added a few related subjects. In 1907 Pennsylvania combined the last three subjects into one test entitled "General Accounting," and from 1916 to 1942 those states which used the service of the American Institute of Accountants combined the second and third subjects into Accounting Theory and Practice.

It is evident that in the first ten years, 1896 to 1905, the scope at least of the examinations was standardized. This was done by nine states, viz., four Atlantic states: New York, 1896, Pennsylvania, 1899, Maryland, 1900, New Jersey, 1904; two Pacific states: California, 1901, Washington, 1903; two central states: Illinois, 1903, Michigan, 1905; and one Southern state: Florida, 1905. Since the area covered by these states extends from coast to coast and from Canada to the Gulf of Mexico, it seems proper to consider them as representative and to take their examiners in that decade as our subject: Some Early Accountancy Examiners.

The laws of three of these nine states provided that the boards were to be inte-

grated with the state educational systems; in New York and Pennsylvania with the Education Departments and in Illinois with the State University. In the other six states the Boards of Accountancy had other duties and powers. The laws of some states provided that one or two members of their boards should be lawyers or, in a few instances, hold some state office. But this paper is limited to the accountant members of these nine boards.

Although the foregoing facts were easily found in the *Year Books* of the American Association of Public Accountants and in the Accountants' Law Service, the early personnel of the boards was not so readily available. To supplement the information found in old magazines and other publications, the Librarian of the American Institute of Accountants has very kindly carried on a fairly extended correspondence, which in most cases has been successful. In some cases, however, the results would have been funny except that they might be serious. One state reported that it did not have records so far back. Another wrote that its first board was appointed in 1921, whereas the facts are that its first CPA law was enacted in 1907 and the names of its first board were given in the *Journal of Accountancy* in that year. Moreover, two of its present board held certificates issued several years before 1921, the year in which the letter states that its first board was appointed. These instances suggest that the boards of those states, in acting upon current matters, may not be giving consideration to the decisions of their predecessors, or taking them as precedents.

Facts about the individuals were even more difficult to locate. The two editions of the *Accountants' Directory and Who's Who* gave facts about some of the early examiners who were living in 1920 and 1925. Very few biographies or memoirs of accountants have been published. The obituaries which were found were usually highly

condensed, and sometimes wholly laudatory. What follows is believed to be correct, but almost surely not complete. Perhaps readers will correct its mistakes and supply its deficiencies.

At the present time in 1943, the fifty-two Boards of Examiners are composed of one hundred and ninety-seven members besides the nine members of the Board of Examiners of the American Institute of Accountants. In 1905 the nine boards then existing were composed of twenty-nine accountant members. And the total of one hundred and thirty member-years represented the services given by forty-six different accountants. These are the Early Accountancy Examiners about whom information has been sought as to nationality, education, training, experience, and terms of service as examiners, with a view to evaluating as far as practicable their qualifications for this service, their points of view, and if possible something of the effects which their service may have had upon accountancy examinations in the first ten years and up to now.

First as to their nationality. Of the forty-six persons, seven were born abroad, two in Germany, Max Teichman of Maryland and Ferdinand W. Lafrentz of New York, and five in England, James T. Anyon of New York, Alfred G. Platt of California, E. G. Shorrock of Washington, Ernest Reckitt of Illinois, and Walter Mucklow of Florida. Apparently the thirty-nine others were native Americans. And since no two of the seven who were born abroad were at one time members of the same board, it seems that the actions of those six boards were not affected greatly, if at all, by the place of birth of the seven members.

Second, as to their educational preparation for the service. Of the seven who were born abroad, Max Teichman, of Maryland, was educated in German institutions apparently of college grade, Ernest Reckitt,

of Illinois, at the University of Manchester, England, and Walter Mucklow, of Florida, at Kings College in London. And of the thirty-nine native Americans, the first three examiners in New York were all college men, Charles W. Haskins in the engineering course at Brooklyn Polytechnic, Charles E. Sprague in the arts course at Union College in Schenectady, and Frank Broaker at City College of New York. Charles N. Vollum of the Pennsylvania board was educated at Girard College in Philadelphia. If the average age of the forty-six accountants was about forty-five when they were named to these early boards, then they were born in the decade from 1850 to 1860, and for seven of the forty-six to have had college training may have been a relatively high proportion in the years 1896 to 1905.

But this does not give the whole picture of their education. Some had been in educational work before their appointment; one of them, John R. Sparrow, of New York, had taught business subjects for fifteen years, and at least seven others were so engaged before or after their service as examiners. And in accountancy literature, Charles E. Sprague and Anson O. Kittredge, both of New York, edited accounting magazines, the latter for twelve years; while Bentley's *Bibliography of Works on Accounting by American Authors* lists four titles by one examiner, two by another, and one each by six others. This record is far ahead of that for the entire profession of accountancy.

Third, as to their training. Of the seven who were born abroad, it seems that five came to this country before or soon after completing their education. But two at least served apprenticeships in England: James T. Anyon, of New York, who became an ACA after his service with Thomas, Wade, Guthrie & Company, and E. G. Shorrock, of Washington, who was an FSAA, but concerning whose training

we have no information. In the twenty or more years immediately preceding the enactment of the first CPA law, a considerable number of foreign-born public accountants had come here and were in practice. Probably employment by them provided the training obtained by some of the other early examiners. The only one as to whom this is definitely known is Frank Broaker, of New York, who was employed by John Roundy, a public accountant who had come from Scotland. Only a little while after this period there were several such instances, a conspicuous one being that of George Wilkinson, who became a member of the New Jersey Board in 1908. He had received his training first with Veysey & Veysey of New York, beginning in 1887, and some years later with Barrow, Wade, Guthrie & Company, of which firm James T. Anyon was then the senior partner.

Fourth, as to their experience. Old records indicate that a few of the forty-six men who served as examiners in the period 1896 to 1905 gave much or all of their time to activities other than public practice. Some seem to have been in business, one at least was a teacher, and some were city accounting officers. Apparently there were only seven or eight in these latter classes. They will not be named here because the known facts are not sufficient for positive statements about them. And of course all or some of them may have given part of their time to public practice. However, in all states and at all times a majority of the accounting members of the boards were public practitioners. And, so far as has been ascertained, each of them had been in public practice for periods of from eight to twelve years or longer.

Last, as to their terms of service. In those first ten years from 1896 to 1905, twelve examiners served about one year each, ten served two years each, twelve served three years each, four served four

years each, four served five years each, two served six years each, and two served seven years each. The forty-six examiners served for a total of one hundred and thirty years, or slightly less than an average of three years each. However, whereas thirty-four served a total of sixty-eight years, or an average of two years each, the other twelve served a total of sixty-two years, or an average of over five years each. Perhaps the influence of the twelve with the longer average service upon the examination work of the boards was greater than that of the thirty-four examiners who averaged only two years in the period studied.

But the twenty-nine examiners who composed the nine boards in 1905 all served one or more years thereafter, some as much as five to ten years. The longest such service among the forty-six early examiners was that of Walter Mucklow of Florida, from 1905 to 1921. Later that record was matched by Charles N. McCulloh of New York, from 1909 to 1925, and was exceeded by Durand W. Springer, from 1913 to 1938. But no other has equalled that of John F. Forbes of California, from 1909 to some year still in the future. These long tenures of position as examiners indicate that their services were satisfactory to the profession and the public, and that, although their work might have been onerous, the examiners found it interesting and inspiring.

Their appointments seem to have been due to various causes. In each of the nine states, one or more of the first examiners had actively promoted the enactment of its CPA law. In some cases nominations were submitted by the State Societies, as has been done in later years. In fewer instances, perhaps, the selections were of persons favorably known to the appointing officer, or upon the recommendation of some one who so advised the appointing officer. Later it was rumored that practical politics occasionally influenced the selec-

tion of accountants as examiners, but so far as was learned such was not the case in the naming of the forty-six examiners in the first ten years. Whatever the reason for the early appointments, they seem to have been fortunate selections.

Turning from this survey of the forty-six examiners of the nine boards as a group, to some of the individual examiners, they will be taken up in the reverse of the years in which their boards were created, since of course those who began their service near the end of the first ten years did not have an opportunity to influence the work as did those who began it in 1896.

Florida was the ninth CPA state, its law being approved June 5, 1905. It had three examiners, of whom one was a banker and one an accountant in Tallahassee. But its most outstanding examiner was Walter Mucklow, of Jacksonville. He was born December 9, 1864, in London, England, of Scotch ancestry, and was educated at Kings College, London. In 1866 at the age of twenty-two he located in Jacksonville. In 1909 he was British Vice-Consul and later Consul, and Norway made him a Knight of the Order of St. Olaf. He promoted the Florida CPA law and received Florida certificate No. 1. He was a member of all the accounting societies and an officer in most of them. After serving as president of the State Society from 1905 to 1931 he was made president emeritus. He was chairman of the Florida Board of Examiners from 1905 to 1921, and in 1941 he wrote that "in the report of a survey made in 1915-1916, Florida ranked fourth in the entire country for the originality of its examination questions." *The Accountants' Index* lists three books and twenty-five magazine articles by him. He died June 14, 1941, at Schenectady, New York.

Michigan was the eighth CPA state, its law being approved May 4, 1905. Its first examiners included one lawyer, one ac-

countant in Grand Rapids, and John H. Clegg of Detroit. No record of the latter's birth or education has been found but, as he was a veteran of the Civil War, perhaps he was born about 1840. He was the oldest public practitioner in the state and was active in the organization of the first Michigan association in 1896 and in its re-organizations in 1901 and 1905, having been in 1902 its representative at the meeting in Washington of the Federation of Societies of Public Accountants in the United States. In 1902 and 1903 he had charge of the preparation of a CPA bill for his state. In all these activities from 1901 or earlier he had the active collaboration of Durand W. Springer, of Ann Arbor, whose activities as an accountant, association officer, editor, and member and secretary of the Michigan board from 1913 to 1938 are so well known that it would be superfluous to repeat them in detail. However, it may not be so generally known that he was graduated from Albion College, had taught business subjects, was a member of the National Education Association and of the Commercial Teachers Association, and had been engaged in public practice since 1887. Since he was from thirty-five to forty years of age in the years from 1896 to 1901 it is possible that his educational experience may have had an influence upon John H. Clegg's services as an examiner.

New Jersey was the seventh CPA state, its law being approved April 5, 1904. The three examiners of its first board were accountants, the best known being Frank G. DuBois of Newark. He was born July 27, 1855 in New York; after finishing high school he took the course at Packard's Business College. He received New York CPA certificate No. 177 in 1901. He was the author of the New Jersey law and served as an examiner from 1904 to 1909. When he was president of the board, it adopted a resolution on April 8, 1908, looking to the

formation of an Association of CPA Examiners. This object was accomplished at Atlantic City, October 10, 1908. Later in 1916-1917 he was a member of the Board of Examiners of the American Institute of Accountants. He died June 7, 1927.

Illinois was the sixth CPA state, its law being approved May 15, 1903. Its first board included a business man, the manager of an audit company whose directors were bankers, and Ernest Reckitt, of Chicago, who was born on October 8, 1866, in Hull, England, and was graduated with honors at Manchester University. He began public accounting in Chicago in 1891 at the age of twenty-five. He served on the Illinois board from 1903 to 1907 and on the Institute board in 1919-1920. He has contributed many articles on accounting subjects to the magazines. Perhaps his interest in his work as examiner is most clearly evidenced by his close association with Doctor David Kinley, who in 1903 was Dean of the College of Liberal Arts and Science and later President of the University of Illinois, which institution by law had supervision of the Board of Examiners. Illinois was the first state to seek a clear definition of a public accountant, in connection with which endeavor Dean Kinley, presumably with the assistance of Ernest Reckitt, consulted many accountants in Illinois and other states.

Washington was the fifth CPA state, its law being approved March 12, 1903. Its first Board of Examiners numbered five individuals including a corporation treasurer, a banker, a city comptroller, an accountant in Tacoma, and E. G. Shorrock of Seattle, who was born in Blackburn, England. At the age of fifteen he was an office boy with the West Lancashire Railway and in 1899 he moved to Seattle to act for British interests in Alaska. Three years later, in 1902, he began the public practice

of accountancy in Seattle. He had become an FSAA presumably before he left England but details as to his experience are not available. He was an officer of his state society and actively promoted the Washington law. He served as an examiner from 1903 to 1911; and his interest in the literature is evidenced by many magazine articles. He died October 28, 1933.

California was the fourth CPA state, its law being approved March 23, 1901. In the five years from 1901 to 1905 it had eight examiners, of whom one did not become a CPA and two were state or city officials. Norman McLaren served the first year only; A. Wenzelberger and Lester Herrick served two years of the five and also one and three years, respectively, thereafter. But apparently the examiner who exercised the greatest influence during the early years was Alfred G. Platt, of San Francisco, who served from 1901 to 1906. He was born in 1852 in Nottingham, England, and moved to San Francisco in 1872, where he was employed in banking until 1880. In that year, at the age of twenty-eight he began the public practice of accountancy. He actively promoted the California law and his interest in CPA examinations resulted in at least one article on the subject. He died November 10, 1910, at Havre, France.

Maryland was the third CPA state, its law being approved April 10, 1900. There were seven examiners on its board in the six years 1900 to 1905. Of these, two were lawyers, two who received certificates were a banker and an actuary, respectively, and one was a CPA in Baltimore and a member of the American Association of Public Accountants to 1915 but of whom nothing more has been learned. The two others were Max Teichman and Frank Blacklock, both of whom were active in securing the CPA law and were early officers of their state society. No information can be given about Frank Blacklock except that he

was born in Baltimore in 1853 and died in 1917, after many years of practice in his city and after having been a frequent contributor to accounting periodicals. Max Teichman was born in Saxony, on June 22, 1860, and was educated in German institutions; after he had moved to the United States in 1883, he was a member of numerous scientific and technological societies besides those of accountants. He was president of the Maryland examiners from 1900 to 1904 and wrote many articles for accounting publications, usually on technical subjects but at least one upon the early history of accounting. He died December 27, 1922.

Pennsylvania was the second CPA state, its law being approved March 29, 1899. In the seven years 1899 to 1905 ten persons, of whom five were lawyers and five were accountants, served on its board of four examiners. These included George R. Heisey, of Lancaster, who served from 1899 to 1903, Frank A. Kimball, of Pittsburgh, who served from 1904 to 1905, and Lawrence E. Brown, of Philadelphia, who served from 1904 to 1912. But probably the early activities of the Pennsylvania board were influenced most by John Vaughan of Pittsburgh and Charles N. Vollum of Philadelphia. John Vaughan, after service as a Navy paymaster and several years in business, was on the staff of his brother-in-law, John Heins of Philadelphia, in 1887; he then began his own practice in Pittsburgh. He was an examiner from 1899 to 1903; the state society received his accountancy library upon his death in 1917. Charles N. Vollum was born in Philadelphia, October 4, 1839, and was graduated from Girard College at an early age. Before and after his service in the Civil war he was in business; he began public accounting practice in 1875. He represented the state society in advocating the CPA law. An unknown has told the story thus:

Throughout the session's long and tedious fight
At meld and deal; at shuffle, cut and draw,
Our gallant Vollum strove through half the night,
And thus he got the votes that passed the law.

He served as president of the board from 1899 until his death on October 26, 1911.

New York was the first CPA state, its law being approved April 17, 1896. In the ten years from 1896 to 1905, twelve accountants filled the three places as examiners. James T. Anyon, born in England where he became an ACA, moved here in 1887 and became the head of Barrow, Wade, Guthrie & Co. He was the first secretary of the American Association of Public Accountants in 1887, was an examiner in 1897-1898, published *Recollections of Early Days of American Accountancy* and many magazine articles. He died February 7, 1929. Rodney S. Dennis was a partner in Patterson, Teele & Dennis, was an officer of his state society, served as examiner in 1898-1899 and died March 9, 1904. Anson O. Kittredge was born in Ohio, February 19, 1848, attended Miami Commercial College, was a bookkeeper at the age of eighteen, and became a manufacturer. During his last twenty years he was an editor of accounting and trade journals, and a teacher in New York University. He also was the originator of the course of study of the Institute of Bank Clerks. He was an examiner in 1899-1900 and died March 23, 1903. Henry R. M. Cook and Arthur W. Teele were public practitioners; both served as examiners 1905 to 1907. The former was a member of the New York City Board of Education and was active in promoting the School of Accounts established in New York in 1892, and the School of Commerce, Accounts and Finance of New York University in 1900. He died January 4, 1932. The latter was chairman of the Institute Board of Examiners from 1916 to 1922. John R. Sparrow was born in Brooklyn in 1859, taught accountancy subjects for fifteen

years, was accounting adviser to the Comptroller of New York City and was a partner in Sparrow, Harvey & Co. He was an examiner from 1901 to 1905 and died April 9, 1921. John R. Loomis was born in Cambridge, N. Y., January 15, 1846, was in public practice many years, and was an active officer of all societies of accountants. He served as an examiner from 1898 to 1905 and died December 7, 1922. Leonard H. Conant, who was an examiner from 1900 to 1903, and Ferdinand W. Lafrentz who followed him, 1903 to 1907, are both living; these two men, together with Ernest Reckitt of Illinois, are the senior surviving examiners. Mr. Conant was born in Washington, April 25, 1856, and was graduated at Phillips Andover Academy in 1874. After some years in business he began public practice in 1888. Mr. Lafrentz was born in Germany, March 25, 1859, and came here in 1873. In 1879 at the age of twenty he was an instructor in accounting in the Bryant and Stratton School in Chicago. He began public practice in 1899.

The nine New York examiners so far mentioned include all except the first three appointees who made up the first CPA examiners anywhere. Frank Broaker was born in Millerstown, Pa., March 16, 1863, and attended City College, New York. At twenty years of age he was employed by John Roundy of New York, who was a CA of Scotland; upon his employer's death in 1887 he began practice on his own account. He was an early member of the American Association of Public Accountants and participated actively in its efforts to establish the School of Accounts in 1892. Then, in 1895 he and W. Saunders Davies represented all accountants in efforts to secure the New York CPA law. His co-committeeman gave him credit for the successful outcome. Perhaps, though not certainly, he outlined the scope of the examination. This seems probable,

because he had worked for a CA and had a complete file of the British magazine, the *Accountant*. He served as an examiner in the year 1896-1897. He died November 11, 1941.

Charles Ezra Sprague was born in New York, October 9, 1842; in 1860 when eighteen he was graduated at Union College with the A.B. degree and a Phi Beta Kappa key; in 1862 he earned the A.M. degree. Union gave him an honorary Ph.D. in 1893, and he became a trustee of the College in 1906. He served in the Union Army from 1862 to 1864 and was discharged as a brevet Colonel. Although his later life was spent as a banker, he was a student of many subjects, including Volapuk—a world language—simplified spelling, and accounting; he was especially interested in accountancy. His acquaintance with the Secretary of the Board of Regents, Melvil Dewey, caused the latter to ask him to be present when the American Association petitioned for a College of Accounts in 1892. His selection as one of the first examiners may have been due to that acquaintance. He was author of *The Philosophy of Accounts*, and *The Accountancy of Investment*. He was a member of the first faculty of the School of Commerce, Accounts and Finance of New York University, but curiously his biography though prepared and published by that institution in 1931 does not mention his service as an examiner in the years 1896 to 1898, though a tablet was erected after he died March 21, 1912.

Charles Waldo Haskins was born in Brooklyn, January 11, 1852, and was graduated as a civil engineer at Brooklyn Polytechnic Institute at the age of fifteen. Thereafter he spent five years as a bookkeeper, two years abroad in the study of art, and about twelve years again as a corporation bookkeeper and internal auditor. He was a member of the Institute of Accounts and started public practice on

his own account in 1886. Six years later he and Elijah Watt Sells were engaged by a Congressional Commission to do some special work and out of that association grew a great friendship and professional partnership. From that intimacy Mr. Sells came to know his associate so well that, as is told in the biography, he later urged and had others urge his selection as an examiner, in which capacity he served from 1896 to 1901. In the latter year he resigned to assist in the organization of the School of Commerce, Accounts and Finance, of which he was the first dean. His society offices, his public addresses, and his publications were so many that they cannot be enumerated here. But the minutes of the Board of Examiners show

that he was regular in attendance and performed a great quantity of work. With his fellow members, including Sprague, Broaker, Anyon, Loomis, Dennis, Kirtledge and Conant, he planned the board's procedure and its rules and practices in connection with waivers of examination, experience requirements for admission, and the issuing of certificates. All this was new. Perhaps however his most important work as an examiner was that of the preparation of the *Certified Public Accountant Syllabus*. This was published in September, 1900, with an attached bibliography that filled forty-seven pages. The *Syllabus* went through two later editions and remained as the standard for the New York CPA examinations until 1935.

TRAINING FOR THE PUBLIC ACCOUNTING PROFESSION

RICHARD S. CLAIRE

TRAINING for the public accounting profession is a continuing process. I suppose no small part of this training process begins at a point in the life of the person long before he has chosen public accounting for a career, and I am sure the process—perhaps the most important part of it—continues from the day he starts as a green junior to the day of his final separation from the profession. Every accounting engagement is a new problem to be studied and mastered, and certainly some of us have had rigorous training at the hands or over the knees of clients. I should like to limit the discussion in this paper to that portion of this continuous training process which lies between the day when our budding public accountant emerges from high school and the day when he becomes a qualified beginner in

the public accounting profession. You will note that the closing date I have selected is the day on which our trainee is a qualified beginner and not the date of his graduation from a four- or six-year accounting course. Far too often these dates do not coincide. The fact that they do not, coupled with the strong desire on the part of all concerned to bring graduation day and qualifying day together, is, as I understand it, one of the major motives for holding Association meetings and having these discussions.

Let us examine the present-day method of training for public accounting. Most schools decide upon and arrange their curricula in such a way that the student upon successful completion of the program will be eligible and qualified to sit in the CPA examination. Curricula are so

arranged that the available faculty personnel will be utilized completely and will enjoy teaching the courses offered. I regret that I cannot include a statement to the effect that the curriculum is usually submitted to and seriously discussed with several practicing public accountants. It seems that this would be a very desirable added step to be taken by those who are arranging curricula. When I make this suggestion about consulting with practicing public accountants to other teachers, occasionally their reaction begins with an icy stare and is followed by a short lecture along the following lines: How can anyone who is a member of the teaching profession dodge the responsibility he has assumed for elevating the public accounting profession and showing it the light? I subscribe less fully to this philosophy than some of my fellow accounting teachers and refuse to admit that all salvation emanates from halls of learning.

An accounting curriculum that is not up to date and does not provide men who are qualified to meet the current problems of public accounting practice is one to be avoided at all costs. Many public accounting firms today show more real concern over their social responsibilities and opportunities for real service to business than could be found in a group of typical accounting professors. Are we teaching how to prepare audit working papers, a task for which many of us are not too well prepared, at the expense of teaching auditing standards? Do our cost accounting courses consist entirely of filling out practice sets, with the result that we have not time to discuss whether or not the final answer may be of use to business management? The leading public accounting firms are today looking for men who have been broadly trained, who have a full understanding of the social responsibilities and standards of conduct which are required of those who enter the public accounting pro-

fession, and who are qualified to render to clients real services far beyond the scope of the ordinary audit.

To what extent should our curricula prepare for the CPA examinations? The CPA certificate is the badge which denotes the attainment of professional status and the coveted goal of the majority of those who enroll in public accounting courses in college. I am sure that many of those who set out to become CPA's do so with only the vaguest notions of what will be required of them and what lies ahead. This situation is reflected, in part, by the huge turnover in the profession and by the large numbers who try but never receive the certificate. If it is true that a relatively small proportion of those who study accounting and even work for a while in public accounting ever become CPA's, should we continue to build so much of a curriculum around preparation for the certificate? I hesitate to admit that the CPA certificate of necessity and of itself signifies that the holder is a man who is thoroughly competent and well trained for present-day public accounting practice. In fact, training for CPA certificates may produce narrow-gauged men to enter a profession that is rapidly becoming more and more broad-gauged.

The importance which various public accounting firms attach to the CPA certificate is not so uniform as is its importance as reflected in many of our curricula. At least one firm insists that a staff man have the certificate as a prerequisite to his attaining the rank of senior accountant. On the other hand, there are firms that look upon the obtaining of the certificate as a desirable, but not necessarily essential, qualification. To them it is more of a reflection of the attitude of the staff man and his desire for a mark of accomplishment. Certainly, some of the most capable men I have known in public accounting are not certified. I hasten to add that such

men do not constitute a majority, and I do not wish to detract from the importance of the CPA certificate or leave the impression that I do not consider it a badge of distinction. However, I do think that in arranging our offerings those of us in teaching have at times attached a greater significance to the preparation for the CPA examinations than is attached to the certificate by those who hire our graduates.

I hope many will agree with me when I conclude that we should leave our campuses more often, consult more frequently with those who ordinarily hire our public accounting graduates, and listen more attentively while those who are practicing the profession of public accounting tell us the type of product they find most useful and desirable. Once the design has been laid out, I think those of us who are in teaching are best qualified to procure, arrange, and operate the machinery which will turn out a product of the agreed-upon pattern.

Our present deliberation over this problem of training for public accounting will constitute only a small fraction of the time that has been and will be spent on the question. Probably we should review and study the nature and results of similar consideration given to the question by others in the past. Recently I reread the published reports of the Committee on Education of the American Institute of Accountants for the past ten years. Reading these reports in chronological order and reviewing ten years' reports in one afternoon gave me a perspective I had never gained by reading them singly and at annual intervals. There seemed to be a recurring thought expressed or implied, namely, that the accounting teachers and public accounting practitioners should be brought more closely together, that something should be done "to bridge the gap."

The Institute Committee on Education has made a variety of attacks on this prob-

lem of "bridging the gap" and of setting training standards which it is hoped will provide the profession with well-qualified and properly trained personnel. In 1936 the Committee recommended among other things that "... four years of collegiate training beyond high school should constitute a minimum educational requirement." This recommendation is one to which practically everyone subscribes. Certainly it will be difficult for us to continue to speak of public accounting as a profession unless we hold to that minimum requirement and foster its extension. I approve this recommendation since it is a step forward, but action in matters of this kind should be taken slowly. Even universal adoption of the recommendation, however, still leaves much to be desired if public accounting is to take its place beside the other and older professions. So far as I know, no other profession has a minimum requirement of education beyond high school as low as four years.

Another recommendation of the Institute Committee in 1936 was to the effect that the suggested four-year course should consist of 60 semester hours devoted to cultural subjects and 60 semester hours devoted to accounting and related business subjects. This recommendation seems to be dangerous from several aspects.

From the standpoint of the teacher and school administrator it may encourage a belief that students sufficiently exposed to accounting and business courses automatically become qualified for public accounting. The yardstick for evaluating the accounting curriculum might become a specified number of semester hours rather than the type of courses offered and the quality of training given during those hours. There might develop a false sense of satisfaction with a curriculum which would probably be hard to change.

From the standpoint of the public accounting firm which seeks qualified per-

sonnel, there might be a temptation to give insufficient consideration to schools whose accounting curricula did not provide the same distribution of semester hours as those recommended by the Institute Committee. At the same time I think most of us would agree that some schools might be doing a better job of preparing for public accounting by devoting, let us say, only 40 semester hours to accounting and allied business subjects. The danger which exists in this area might be made even more acute if the Institute Committee should publish a list of colleges and show the extent to which each provides the suggested distribution of program. This idea of rating schools of business and universities was suggested in the 1936 report of the Institute Committee on Education but subsequent reports do not indicate that this idea was put into effect. Of course, the effectiveness of such a rating of schools which offer professional accounting training would not be lasting; for as soon as it became known that a certain school which did not meet the formal standards was nevertheless doing an excellent job of preparing men for the profession, public accounting firms would turn to that school for personnel in spite of the fact that it did not meet the standards of the Committee on Education.

In the 1942 report of the Institute Committee on Education, a somewhat different approach was taken. At that time the Committee made known the results of a questionnaire which had been submitted to representative teachers of accounting in which they were asked to give constructive suggestions concerning the future activities of the Institute Committee. As might be expected, these replies showed very little by way of a definite pattern or consensus. Some thought that more auditing practice should be included in the curriculum; some were of the opinion that schools overemphasized specialized courses; others

urged that tax courses were essential. It was also suggested that younger members of college faculties should be released for brief periods for work with accounting firms. A majority of the professors expressed the opinion that too few of their more capable students were being employed by public accounting firms. This last expression of opinion seems to me to be one of the most noteworthy of the various replies received. I think it indicates the width of the gap between practitioner and teacher rather than a surplus of men properly trained for public accounting or a lack of vision on the part of public accountants. It suggests that too many graduates who carry the stamp of approval of their professors and schools are, for some reason or other, not prepared and do not have the qualifications which the practitioner believes to be necessary.

Such a questionnaire may serve the purpose of "bridging the gap" between the practitioner and the teacher, but I hesitate to admit that it can do much toward crystallizing a desirable scheme of training for public accounting. The evidence seems to point to the impossibility of prescribing any single curriculum which will serve the purposes of all public accounting firms, as well as to the impossibility of agreement among public accounting firms as to the type of man and training which they consider to be best.

When one considers how widely the engagements and clients of various public accounting firms differ, it is not surprising that a single curriculum will not fit the training needs of all. It is true that in general all public accounting firms perform similar types of services such as auditing, system installation, and assistance in tax matters, but the kind of personnel required by the firm with large clients is often different from that needed by the public accounting firm that specializes in preparing monthly financial statements for clients,

in bankruptcy work, and in preparation of tax returns for individuals and small businesses.

Any uniformity of programs of training for the profession seems even more futile when looked at from another angle. Under the present scheme of things, every spring just prior to the annual hatching of junior accountants, our campuses are visited by representatives of public accounting firms who are looking for good men. They never look for mediocre men and, I might add, I don't blame them for the position they take. On the other hand, I am sure that not all men employed by all public accounting firms are top-notch. Probably there is a hidden discounting process at work whereby the representative feels that if he asks to see only the best men in the class the accounting teacher's enthusiasm to get his men placed, or perhaps his ignorance as to what type of man is highly qualified for public accounting work, will operate to bring the representative in touch with the cross section of skills, abilities, and personalities which are necessary in staffing any public accounting firm.

Ostensibly the representative is looking for junior accountants when he comes to our campuses. Really he is hoping to hire a group of men from which he will eventually draw a partner, several managers or supervising seniors, and a still larger number who will have reached their peaks of performance at the senior accountant level. The apparent search for juniors fits our offerings because each of our graduates has come from a single mold marked "Public Accounting Majors." We have done practically nothing to assist the public accountant in choosing men for varying levels of responsibility in the profession. About all we can say is that one graduate has a more pleasing personality than another and that one stood first in his class whereas another ranked number twenty-eight.

In other professions this situation is less frequently met. The military profession has West Point for training junior officers, but there is also the Command and General Staff School at Leavenworth for training general and staff officers. In medicine there are many schools which turn out M.D.'s, but certain ones have become famous and of particular service to the medical profession by providing postgraduate work designed to turn out surgeons and specialists skilled in certain lines or with that extra training which increases their chances of attaining leadership in the profession.

I think that the public accounting profession may now be at that stage of growth and maturity where it would be glad to have the teaching profession provide training for various levels of public accounting responsibility and a limited amount of training along more specialized lines. Perhaps that statement is not in accord with fact and is unfair to the public accounting profession. Certainly some in the profession have been demanding training of this sort for a long time, but those of us in the teaching profession have turned a deaf ear to the suggestion. I do not expect to be seriously or justifiably contradicted when I say that there is no professional postgraduate school in this country today that really makes a specialty of training public accountants for the higher levels in the profession. We have no Command and General Staff School for accounting.

At the present time a man who has decided upon public accounting as a career ordinarily faces two alternatives with respect to the amount of training he will get before entering the profession. He can take one of the customary four-year undergraduate courses in commerce or business administration at a school which has attained some reputation for training public accountants. As I said before, this course

may very likely consist of training for success in the CPA examinations, with 40 to 60 per cent of his time devoted to cultural subjects. Or he may choose to spend one or two years in a graduate school of business administration after completing his four-year course and before entering public accounting. This additional year or two will probably provide a few more accounting courses interspersed in a program of allied business subjects such as marketing, finance, and business policy. On the other hand, his postgraduate work may consist of a year or two of study devoted almost solely to accounting subjects.

I am of the opinion that if this prospective public accountant elects training alternative one, the chances are somewhere near three to one that he will find himself to be a narrow-gauged man entering a profession that demands, particularly in the higher echelons, more breadth of vision, training, and understanding of all phases of business than his formal training will have provided. If he elects training alternative two, I am quite confident that his chances of entering public accounting with a deficiency in preparation are materially reduced. I believe, however, that we who are in the teaching profession have not devoted sufficient attention to providing real professional schools and curricula for the men who wish to enter public accounting so well prepared that the long arduous road to leadership in the profession will be shortened and made easier. I would even strengthen that statement by saying that our position has been closer to one of dereliction of duty to the profession than one of lack of sufficient attention. At the very time when some of us have been bemoaning the fact that public accountants have been slow to recognize their obligations to society and the broader aspects of the accounting profession, we have done nothing to show that the teaching profession is able or willing to offer much help to the very

profession it purports to serve and lead.

For example, there are those who believe that the Harvard Graduate School of Business Administration has not assumed its proper share of the responsibility for training high calibre men for the public accounting profession. A number of graduates of this school have attained eminence in the profession of public accounting, but I think it should not claim a disproportionate share of the honors these men have gained. The school has made certain that its graduates were not narrow-gauged, and I say this is an admirable objective, but in the process of broadening every precaution has been taken to make sure that the graduate who entered public accounting did so with so few of the tools and skills needed during the early and most trying years in the profession that only the most able survived the first spring recession. This attitude and approach seems to me to be fraught with just as much danger, and misses the mark with respect to serving the public accounting profession just as far, as a program which grinds out men skilled in techniques but unable to see anything more than the equality of footings on a balance sheet.

Today there are two words that are buzzing with all the spark and elusiveness of an electric charge in some public accounting firms—business consultant. They are also buzzing with even greater elusiveness at some schools. It is a reflection of a rapidly increasing realization on the part of public accounting firms that many of their clients have been in need of and, in some instances, have been paying for diagnosis whereas they were getting little more than an annual reading of temperature. In order to grow, and perhaps just to survive, public accountants will have to provide added services in the future. They are in an ideal position to provide business consulting services and if they do not fill the need some other group will. We need not wait

for the future to find the evidence of this. This condition affects us in the teaching profession because the demand for broad-gauged professionally trained men who have an understanding of the many facets of business is already here, and our curricula and programs must provide such men.

Some public accountants have expressed themselves as being somewhat hesitant about increasing the scope of their services to clients much beyond the ordinary auditing relationship for fear of thereby losing their status of independence in the eyes of certain governmental regulatory bodies. It will be unfortunate for all concerned if this hesitancy develops to such a stage that business cannot obtain the advice and services of the very persons best qualified to render such assistance. I find it difficult to believe that an accountant who provides his client with consulting services in matters related to accounting and who takes no part in formulating or executing company policies thereby disqualifies himself from expressing an independent opinion regarding the company's financial statements.

Certain things must be in his program of preparation if a public accountant is to be qualified by training and experience for this high sounding but imminent and responsible position as a consultant to business. He will have to be above average in his knowledge of marketing; he will have to be qualified to grapple with tough financial problems; he will need to know more about taxation than just how to fill out the forms for filing; he will have to have a grasp of cost accounting in the utilitarian sense; and perhaps he will be called upon from time to time for assistance in such widely varying fields as personnel and plant layout. Clients will not turn to public accountants for the complete solution of all these problems, but they will wish to discuss them with accountants whom they consider qualified to offer construc-

tive suggestions and assistance.

Let us not be deceived into thinking that any school, however excellent its curriculum, however skillful its instructors, however great its prestige, or however long its course of study, can turn out graduates who are qualified for immediate or even early use in a business-consultant capacity by a public accounting firm. There surely will be several years of hard, back-breaking work as a junior and semi-senior before a man moves to that higher echelon in the accounting profession wherein the business consultant is to be found. There is a reason why I referred to the elusiveness of the term "business consultant." I have heard far too much talk about training public accountants to be business consultants with no recognition of the need for including in that training some preparation for an inevitable interim period between graduating from school and qualifying for the more responsible positions in the public accounting firms of the future. There are spurs to be won on the climb to the top in the public accounting profession, and I think it is downright heresy to talk about training for top-flight positions or for the business-consultant aspect of the profession and at the same time to arrange a program of study which omits or treats too lightly those aspects of training and preparation without which a man may not survive, and probably cannot excel, during the period while he is earning his spurs.

Up to this point most of my remarks have been critical in nature. I should like to turn now to the more difficult and equally debatable matter of offering some suggestions which seem to me to be constructive in nature. What kind of educational program should be available to a man who, having decided upon a career in public accounting, wishes to get the maximum and best possible preparation before embarking on his life work? Presumably he wants a training that will not only equip

him with the ability to handle his job during his early years in the profession but also expedite his rise to positions of greater responsibility in the accounting firm of his choice.

Assume that this man's decision to enter public accounting was made at the completion of his high school work. His first step in securing proper training should be to complete a four-year undergraduate course in commerce or business administration with a major in accounting subjects. Here I would agree with the American Institute Committee on Education that the curriculum in this four-year course should consist of approximately one-half cultural subjects, with the remainder of the courses being well distributed among accounting and related business subjects.

His selection of a school in which to take this four-year course is more important than one might think if one looks only at catalogues, titles of courses, and the long list of schools offering such commerce or business administration courses. I make this statement with conviction. During the past few years I have had occasion to observe the end-products of many four-year curricula. The top-ranking graduates of undergraduate business schools are as dissimilar as night and day in ability and in understanding of business in general and accounting in particular. It is this observation that leads me to recommend that the selection of an undergraduate school be made with great care. The student should do all in his power to select a school in which accounting philosophy, as well as technique, is taught. He should select a school where accounting is looked upon as a means to an end and not as an end in itself; where the relationship of accounting to other aspects of business is recognized; and where the technical aspects of accounting are viewed as the results of reasoned conclusions founded on experience and certain fundamental principles rather than

as a mass of mysterious rules to be memorized and applied.

It seems to me that graduation from a four-year course of the general nature described would equip the graduate for his early years in the public accounting profession, that period during which he is earning his spurs as a junior and semi-senior. Let no one take that remark to mean that four-year men are destined to rise no higher than semi-senior rank. In fact, most of our leaders in the profession today have come from this group. They have gained in the hard and rather slow school of experience that extra something required of leaders.

Now let us return to the man who has just completed his four-year commerce course. Assume that he wishes to get further formal education before entering the accounting profession, because he believes that such a move on his part will reduce the period of time he will have to spend in the lower levels of public accounting responsibility. Here I am at a complete loss as to what might be recommended to him. There are no professional schools that train for public accounting as such, and the field is limited and unattractive if one turns to graduate schools of business administration which offer courses which would be particularly useful to a commerce school graduate who wishes to make additional preparation for the profession. Even if I knew of and wished to recommend such a professional school, I would advise that one or two years of practical experience in public accounting be obtained prior to undertaking the advanced study. There are definite limitations on the amount of advanced training which can be given effectively to men who are without accounting experience and perhaps somewhat short of maturity.

I cannot believe that this blind spot in our educational system will be with us forever or even for very long. Someone will

attempt to supply the needs of the young man we have pictured. I visualize this professional public accounting school which is bound to appear as having some of the following general characteristics. It will probably offer a two-year course. The staff will be picked with such care that practically every member will have had practical experience in the field in which he is teaching. Students will be selected with equally great care and no thought will be given to huge graduation classes or mass production. But you ask: How can you balance your school budget with that heavy pay roll and only seventy-five or one hundred students? If the job is well done and carries the approval of the leading public accounting firms, I believe that endowment and financial assistance from such firms would be forthcoming in amounts sufficient to balance the budget. I have discussed this matter with members of several firms and am convinced that the hope for such financial assistance is not just wishful thinking.

The exact nature of the curriculum for this two-year professional course could be determined only after careful study and considerable consultation with leaders in the public accounting profession. However, it is possible to think of the general pattern which it might assume. Probably a portion of the curriculum would change decidedly from time to time as the nature of the services rendered by the profession shifted. The first of the two years doubtless should include a few advanced accounting courses and offerings in taxation and business law, but the bulk of it should be spent on business courses of a broadening character. It might include a course such as business policy, which would unify and coordinate the separate business courses taken up to that point. Certainly the plan for the first year should include an intensive and practical course in writing business reports of various kinds, including

audit reports. Courses such as business history, business economics, and history of accounting and of the public accounting profession would fall within the scope of the broadening subjects included in the program for the first year. I should like to emphasize the necessity for keeping these broadening courses on a level of quality and importance comparable with that of the accounting courses as a guarantee that they will not degenerate into side-line courses in which mediocrity of course content or student performance is accepted as being satisfactory.

It seems to me that the second year should be almost solely devoted to subjects bearing on the duties and responsibilities of partners, managers, and supervising seniors in public accounting firms. Here I can see the need for courses covering such matters as auditing standards; client relations; supervision of audit field work; review of audit working papers; ethics of the public accounting profession; office and personnel management; training of personnel; setting of audit fees; relationship with regulatory bodies such as the SEC, utility commissions, and the Bureau of Internal Revenue; and relationship with investment bankers and lawyers. I am assuming that courses taken in prior years will have given a solid foundation in accounting principles and procedures as such.

Up to this point I have suggested a possible course of training for a man who has decided at the end of high school that he is going to train for public accounting. Unfortunately, a substantial number of men make the decision three or four years later, with the result that their first four years of college training may consist largely of cultural subjects or at least of subjects that are preparatory for neither business nor accounting careers. I think that the professional school of the future will therefore have to provide for three years of professional training for these men, and that the

additional year required of them will represent a penalty for their late decisions. This penalty is not so severe as it might sound, for I feel confident that the breadth of training gained by taking more cultural subjects at the undergraduate level will pay real dividends in the public accounting profession.

I am fully aware that what I have said is not conclusive; neither does it set up an exact curriculum for training for the public accounting profession. However, I hope you will agree with me that those of us who

have assumed the responsibility of training young men for public accounting must provide a professional school or schools if we are to fulfill our obligation to society and to the public accounting profession. I should like to think of it as a school devoted to training broad-gauged accountants, who, after the proper period of seasoning by experience, will be able to assume positions of leadership in the public accounting profession. The problem we face is a large one and success will not be ours on the first attempt.

PROGRESS IN CPA LEGISLATION

R. L. BOYD

IN JUNE of last year the Illinois legislature enacted a new CPA law to repeal and replace both the CPA law of 1903 and the public accountant law of 1927. Certain important features of this new law provide for freedom of interstate practice with control of out-of-state practitioners, eventual restriction of public practice to certified public accountants, recognition of general education beyond the high school level, and requirements for accountancy education of a collegiate grade. None of these provisions were included in the original law; all represent progress toward the attainment of full professional status for public accountancy.

One of the first problems which faced certified public accountants at the beginning of CPA legislation in this country was that of practice in states other than those in which they secured their certificates. Apparently, little thought was given to this problem by New York accountants in securing passage of the first law in that state; and early decisions of the administrative board were opposed to the recognition of out-of-state certificates. Illinois

accountants early recognized the interstate nature of public accountancy and were first to state the principle of freedom of practice in a statute. A section of the 1903 law provided that "... nothing contained herein shall operate to prevent a certified public accountant who is the lawful holder of a certificate issued in compliance with the laws of another state, from practicing as such within this state, and styling himself a certified public accountant." In other states, however, accountants felt that such a provision would not give proper administrative control of certificate holders. To allow interstate practice and at the same time to secure some control over all those practicing as CPA's within the state, New Jersey in 1904 provided for the issuance of certificates on the basis of reciprocity of action by other states. The idea of reciprocity rather than complete freedom of practice spread rapidly and is now in effect in a great majority of the states.

The Illinois public accountant law of 1927 provided for the licensing of practitioners and the restriction of practice, but

it recognized out-of-state accountants only if their states recognized the Illinois license rather than the CPA certificates. Its effect was to prevent out-of-state accountants from practicing in Illinois without taking an additional state examination. In its 1943 CPA law, Illinois has now recognized the desirability of reciprocity by inserting a provision that the University of Illinois may issue CPA certificates to the holders of valid certificates from other states if the applicants' certificates were secured by written examination, if the educational requirements of the state of issue were equivalent to those of Illinois at the time when the original certificate was secured, and if the individual has met the personal requirements of age, citizenship, and good moral character. For the first time in forty years it is possible for outside certified public accountants to secure Illinois CPA certificates without additional examination.

Another feature of the 1943 Illinois CPA law is the provision for restriction of practice to certificate holders licensed by the state. Under this provision the State Department of Registration and Education will in the future license only individuals holding CPA certificates issued by the University of Illinois.

The desire for restriction of practice to recognized public accountants goes back prior to the first CPA law in this country. Two bills introduced in the New York legislature in 1895 (one by the American Association of Public Accountants and the other by the Institute of Accounts) were both definitely restrictive. However, there was considerable opposition to such clauses on the part of state employees, bookkeepers and others who felt that to restrict the practice of public accounting to certificate holders would interfere with their own rights to engage in part-time practice. The law of 1896 accordingly omitted all reference to restriction. As a result of this early

defeat, and the meeting of similar opposition in a few other states where such legislation was contemplated, none of the original CPA laws enacted in the several states (except for a short-lived law in Oklahoma) limited practice in any way.

Nevertheless, certified public accountants through their state-granted titles soon gained such prestige in the practice of public accounting that uncertified men made strenuous efforts to secure similar recognition. An increased demand for accountants was created by the introduction of the corporation tax act of 1909, the personal income tax law of 1913, the efforts of the Interstate Commerce Commission to secure adoption of uniform accounting systems, the endeavors of the American Bankers Association to secure improvement in methods of verification and presentation of financial data for credit purposes, the tremendous expansion of industry (with its cost-plus contracts) during World War I, and the excess profit laws of that period. This argued demand for service brought so many non-certified individuals into the public accounting field, and directed the interest of so many others toward it, that those unable to meet the requirements for state certification soon sought other means of securing equivalent public recognition.

Efforts of this nature first took the direction of fostering CPA legislation in states which had not yet enacted such laws, in order that certificates by waiver might be secured. So great was this effort and so varied were the standards of certification by waiver that some members of the American Institute of Accountants for a time after 1916 sought to promote recognition of Institute initials, AIA, rather than CPA. The same conditions were primarily responsible in 1917 for the Institute's uniform examination service, though it was originally designed as a basis for recognizing qualified public accountants for mem-

bership in the national organization. The peak effect of this movement for easy certification, however, was the formation of a so-called "National Association of Certified Public Accountants" under the laws of the District of Columbia early in 1921. This organization had for its stated purpose the unification of the profession of public accounting through the issuance of national CPA certificates. Certificates were to be issued on the basis of examinations. So successful were these mock "examinations" that more than 3,000 non-certified individuals secured "national" certificates in less than one year. Action in court in 1923 finally resulted in prohibiting the organization from conducting examinations or issuing national certificates. This action in turn resulted in vigorous efforts by the non-certified to secure waiver certificates in various states; and if they failed in these efforts, they then sometimes sought the repeal of state CPA laws. They met with some measure of success, but generally with failure throughout the 1920's and the early 1930's.

Illinois was unable to control these activities. Because of the wide-open provision in its 1903 law which allowed practice by CPA's from other states, the holders of National Association certificates could without penalty call themselves CPA's and practice in the state as such. Even court action to prevent the use of these certificates proved to be unsuccessful, as was shown when the Illinois Supreme Court (in the case of *Gore vs. National Association of CPA's et al.*, 1923, 231, Ill. App. 38) held that holders of these certificates could practice in Illinois. Fortunately, the success of Federal court action against the National Association at that time effectively prevented the use of the bogus certificates. However, legislative efforts of the non-certified in Illinois were successful in 1925 in getting a law passed to license public accountants by the State Depart-

ment of Registration and Education and to prevent practice by all others (including certified public accountants) not licensed by the state. This law was soon declared unconstitutional, but a similar one enacted in 1927 remained in effect until the new law of 1943 was passed. During that sixteen-year period Illinois had the unsatisfactory distinction of being the only state in the union with two separate laws which authorized to grant two different administrative groups to two different titles to public accountants. As a matter of fact, individuals who were unable to secure CPA certificates could be licensed to practice public accounting in the state, whereas certified public accountants could not practice without securing a similar license.

So long as CPA legislation affected only the examination of candidates and the issuance of certificates, the Illinois form of administration was satisfactory. When the restriction of public practice to certificate holders was introduced, state department administration for enforcement became necessary. The 1943 Illinois law, however, provides for a type of dual administration not in effect in any other state. Whether or not it represents progress is a matter of opinion. Under this law, the University of Illinois is to determine qualifications of candidates, appoint examiners, and issue certificates. After a certificate is issued, the holder cannot legally practice as a certified public accountant within the state until he has been registered with the State Department of Registration and Education on the basis of a certain amount of required experience. The CPA certificate in Illinois, therefore, partakes somewhat of the nature of an educational degree secured by meeting certain educational and personal requirements and passing a severe written examination. It can no more be revoked by the University than an academic degree earned by a student can be taken away. Action for revocation lies

with the Department of Registration and Education.

Restrictive legislation has been considered or attempted in practically every state and has been successfully accomplished in thirteen, but not without granting some recognition to non-certified accountants. Its progress has been temporarily delayed by present conditions but will undoubtedly continue until eventually no one in this country will be allowed to practice public accounting unless he first meets the high standards of certification required by state laws.

The 1903 Illinois law contained the earliest statutory requirement of high school education for candidates. Administrative boards in New York and Pennsylvania had set up a requirement of high school education for candidates in an attempt to place certified public accountants on a professional par with attorneys and doctors, for whom similar requirements were then in effect. Illinois, however, was the first to require it by statute. So far in advance of the times was this educational requirement that as late as 1907 people who opposed the provision secured an amendment which provided that it be waived for the May examinations of 1908 and 1909. As late as 1926, the American Institute of Accountants recommended in a model law the substitution of "sufficient commercial experience" for high school education. Nevertheless the conviction has grown that broad general education, as well as technical preparation, is a necessary basis for professional standing. In the early days of CPA legislation, general preparation was evidenced by high school graduation. Today a college education is becoming necessary.

Progress toward general college education as a statutory requirement has not been very satisfactory. New York has required a college degree with a major in accountancy. California will require, be-

ginning January 1, 1944, two years of general college training. No other state actually requires more general education than that received in high school. A few still allow commercial experience as a substitute. However, a trend toward such requirements is indicated by provisions which give some credit toward required experience for such education. Pennsylvania, for example, will accept evidence of a general college education in lieu of two of the five years' experience otherwise required. In Kansas, general college education is similarly recognized. The 1943 Illinois law also recognizes this trend by accepting two years of college education in lieu of one of three years of required experience, or four years of college education in lieu of two years of experience. It does not, however, make college education an absolute requirement.

It is further significant of our general lack of progress in this respect that suggestions for increased general education requirements are often opposed by accountants themselves. As a matter of fact, accountancy is far behind the other professions in this requirement in spite of recommendations by committees of the American Institute of Accountants from time to time in recent years that ultimately all applicants for CPA examinations should be required to have had a college education. However, progress is definitely though slowly being made in that direction.

One of the most important characteristics of any profession is the requirement of professional education prior to authorization for public service. Accountancy legislation has long been weak in this respect. Prior to the first CPA law, members of the American Association of Public Accountants (later the American Institute of Accountants) sought to secure professional education of candidates. A School of Accounts was established in 1892 with the

expressed hope that the graduates of this school would be licensed by the New York Board of Regents. This, it was thought, was the way to secure professional education for accountants by the American method of classroom training rather than by some type of apprenticeship.

Professional education requirements were sought in the first accountancy bill introduced in the New York legislature in 1895. It provided for additional training in accountancy by stating that any person to be licensed must have completed a two-year course of study in a technical school of accounts authorized by the Board of Regents of the University of the State of New York. However, the legislative influence of those who must have been more interested in new titles than in providing adequate preparation for practice resulted in the omission of technical education requirements in the law and thus was lost to the future profession the benefit of early statutory pressure for schools of accountancy.

Technical education in accounting as a requirement for admission to the CPA examinations was omitted from other early laws because the pattern was already set and because no technical schools were then in existence, or because the schools in operation had not yet developed their courses to the extent necessary to provide satisfactory preparation of professional accountants. Instead of education, both law and regulation placed emphasis upon a requirement that applicants for certification must first secure experience in public accounting practice. (Whether or not they secured the experience under the direction of professional accountants or through their own engagements seemed not so important as the fact that they had shown proof of practice.) Although CPA legislation spread throughout the country, technical education was almost wholly neglected for a long time.

Colorado was one of the first states to give some recognition to technical education when, by board regulation in 1913, it allowed training in a school of accounts and finance to be substituted for two of the three years of practical experience required. However, the first real effort to have accountancy education legally recognized as a method of preparation for public practice was made by Maryland accountants, who in 1916 succeeded in securing an amendment to their state CPA law allowing college education in accountancy to be completely substituted for the experience requirements. Since that time a large number of states have recognized by law or by State Board regulation the value of technical education in accountancy in that they have permitted either partial or complete substitution of such education for the experience requirements. A few states have given a sort of negative recognition to this type of training by first increasing the experience requirements and then allowing partial substitution of education in accountancy only to the extent of the additional requirements. At the present time approximately one-half of the states give some such recognition to accountancy education. Four states allow full substitution of accountancy education for the experience requirements.

Yet very few states have progressed to the point where education in accountancy is actually required of all CPA candidates. The New York law provides that after January 1, 1938, all candidates must have satisfactorily completed a course of study in an approved college or school of accountancy. (Pressure from applicants without such training caused the state board to waive this requirement until January 1, 1941.) By regulation, every candidate for examination in New Jersey after January 1, 1944, will be required to have completed an approved program of study of accountancy. The new Illinois law includes a

similar requirement but recognizes the necessity for slow development by allowing some time to elapse before it goes into effect. In the fourth, fifth, and sixth years after passage of the law, applicants must submit proof of the successful completion of at least sixteen semester hours or the equivalent in the study of accounting. In the seventh and succeeding years the candidates must have had at least thirty semester hours or the equivalent in the subjects of accounting, business law, economics, and finance, at least twenty of which must have been in accounting.

Public accountancy is still far from having achieved an educational status equivalent to that of other professions. This is shown by such facts as these: In a few states high school education is even now not required of all candidates; only two states require some general education at the college level; only three states require some technical education in accounting.

Legislation does not of itself produce progress. It reflects and protects the progress already made. The difficulties met in securing legislative requirements for higher professional standards therefore indicate

that accountancy is not yet fully prepared for higher standards. Legislators are not likely to be ready to restrict all public practice to CPA's so long as there remains a public demand that can be satisfied by the services of the uncertified. This demand will continue as long as the need for accountancy services exceeds the supply of such services by certified public accountants, and until the public is well educated as to the public and individual importance of having auditing and other technical work performed only by men of tested qualifications. Higher standards for admission to the profession will not be hard to obtain when the profession and the public are fully ready for higher standards. When general and technical education are widely recognized as basic to the professional character of public accounting, it will be easier to induce legislatures to restrict public practice to certified public accountants.

Professional accountancy still has a long way to go to secure complete public acceptance of its technical services and legislative recognition of its professional characteristics. Nevertheless, progress is being made. It is slow, but in the right direction.

PROFESSIONAL ACCOUNTING PRACTICE TODAY AND TOMORROW

DONALD P. PERRY

A CONTEMPORARY writer says that men "... who have always been secure come to feel that life will stay the way it is, or that it will get back to normal after a disturbance"; but when their dreams of security are dispelled they "... are likely to go to the other extreme ... and conclude that everything must alter radically, and for the worse." Our dreams of security have certainly been dis-

turbed. Where between the extremes are we likely to find ourselves when the disturbance subsides? Will our activities and our outlooks in the field of accounting be radically altered or shall we find them back close to the former normal? I shall try to paint briefly and with a broad brush the probable effects of recent developments on the future practice of accounting. While disclaiming any prophetic power, I feel

that some wartime trends and developments may be considered indicative of the future and that their effects will carry over to some extent into the postwar period. Just as the onset of the war emergency brought no abrupt revolution in accounting practices, but instead gradual developments to meet changed situations, so the advent of peace at some future date will not suddenly return us to the conditions of the late thirties. Postwar business conditions will be different from prewar, and, furthermore, accounting practice and practitioners will inevitably be affected by the experiences and problems encountered during the emergency.

Many problems arising as the result of wartime conditions will continue to perplex us for years after the war. Uncertainties which will be resolved only by future developments have in the past presented difficulties in accounting practice and have been a basis for criticism by some who hold the erroneous conception that accounting statements are by their nature intended to be exact and accurate representations of fact. Uncertainties in financial position and operating results have been multiplied under war conditions, and unsettled factors in connection with the termination and renegotiation of contracts and with our complex taxation scheme will remain to a substantial degree for many years. The bearing of these uncertainties on corporate credit and on appraisal of security values will obviously be of major import in relation to peacetime working-capital requirements and financing possibilities. The accounting profession may be faced with the need of developing further techniques for dealing with these uncertainties informatively and with judgment, fairness, and restraint. For example, it was not uncommon in 1942 financial statements to deal with prospective renegotiation of war contracts solely as a contingent liability covered by a balance-sheet footnote. Some

companies have met with rude surprises in the effect which actual settlements have had on the year's operating results. If no fundamental changes are made in the statute, accountants will undoubtedly feel that, for 1943, financial statements should in some way incorporate reasonable provisions out of the year's earnings for renegotiation refunds.

Industries expect after the war a more or less protracted period of retooling, plant reconversion and rehabilitation, and redevelopment of markets. Accountants may then be urged to approve deferment in charging the costs of such prospective efforts until later periods when profitable results therefrom are anticipated. Management will desire to relieve current operating expense of some of the burden of re-establishing maintenance postponed during the activity of the war production years. Decisions may be difficult as to the proper application of postwar contingency and other reserves previously provided out of profits or otherwise. Representations made in financial statements when the reserves were provided, the treatment accorded reserves in contract settlements, in renegotiation proceedings, and in taxation, and the over-all fairness of proposed accounting handling will all be considered in dealing with these questions. The wisdom and judgment displayed by the profession in this area may provide a criterion upon which will depend future confidence of the public in the profession.

Obsolescence of property, plant, and equipment is another factor which will merit careful consideration when present emergency production has ended. The volume of goods required for war purposes has made it profitable to utilize to capacity many plants which in normal times have been submarginal. The efficiency of such properties and of other old plant and equipment will be eclipsed by new productive capacity installed in wartime at a cost

of some twenty billion dollars, the greater part of which is government owned and the rest privately owned. Obsolescence of prewar machinery will also have been hastened by the accelerated development of new products and new applications of materials, such as plastics, light metals, electronics, and transportation and communication equipment. Limitations on provisions for obsolescence allowed for purposes of taxation and renegotiation may have been such that current accounting provisions do not adequately reflect the true extent of obsolescence. Business management should face such facts, and the accounting profession should be prepared to assist it in taking a realistic attitude towards plant utility and value.

Because most manufacturing concerns have been engaged on production under government contracts which in settlement, termination, or renegotiation have involved determinations or allocations of costs and profits, the methods used in cost accounting have assumed great importance. Information which can be made available by cost accounting methods and cost departments will not be cast aside lightly after the period of government contract operation has ended, at least by most concerns. However, the cost accounting function in many companies may be expected to undergo refinements and a shift of emphasis from use for contract-cost determination to use for controlling production efficiency and measuring profit margins under trade conditions of keen competition. Markets will change fundamentally from the present situation, in which the government is the chief or sole customer, to a most active competitive status. Restrictions on instalment buying will eventually be lifted and a vast accumulation of liquid assets and purchasing power, deferred during the period when many consumers' goods have not been available, will be awaiting the potential production

of America's expanded industrial plant. In such a revival of intense private competition, the services of those experienced in practical cost accounting will be in demand for estimating new cost standards and providing effective controls over production and distribution costs, rather than for making historical determinations of contract and other costs.

With income and profits taxes absorbing a major portion of the operating profits of business concerns, with the increased rates of personal income taxation, and with millions of new taxpayers reporting to the Treasury Department as the result of increased earnings and lowered exemptions, it is not strange that there is a growing popular concern over the complexity of our national system of taxation. Congress begins to realize that the structure is in danger of falling of its own weight and that some simplification must be made. Accountants who have dealt with tax questions throughout their professional careers have a peculiar opportunity to make substantial contributions in this field. As members of an organized profession they have on past occasions offered suggestions for legislation and administration, but perhaps in the future such suggestions drawn from experience may be accorded more weight than ever before. It is not impossible that simplification of our income tax administration might develop in a direction which would place added responsibilities on the accounting profession. Shortage of available income tax inspectors led the Canadian tax authorities in 1942 to experiment with a plan that placed greater reliance on the auditors of taxpayer corporations, whereby the auditor reviewed a questionnaire supplemental to the tax return and made a written report thereon including a statement of the scope of his examination. The questionnaire is relied upon to disclose to the authorities possible differences between corporate income as

reported and income subject to taxation. Many of the complexities of our Federal tax practice arise from the differences between taxable and book income which stem from technical definitions drawn by the law and Treasury regulations—differences which in the long run often wash out without affecting the aggregates over a term of years. After all, the whole development of accounting principles and practices has had as one primary aim the fair determination of income. An income tax structure which produces returns with more and more differences from fairly determined corporate earnings is certainly not a sound national development. If the Canadian experiment should prove successful, our own authorities might draw upon that experience and upon somewhat similar practices in Great Britain and endeavor to bring income subject to taxation more closely in line with book income as reported and examined by independent auditors. Granted that there is little evidence in current administrative or legislative trends to suggest that such a change in policy is likely in this country, nevertheless, it might possibly result from general dissatisfaction with the present situation. It would entail an added responsibility for the accounting profession, and possibly require a more independent and judicial approach to tax work than at present; but it is the type of social responsibility which the profession should be prepared to accept if it develops.

Prior to the war, the average accounting practice was largely composed of audit work and preparation of tax returns, sweetened on occasion by nonrecurring system engagements or cases dealing with new financing. The scope of services rendered by accountants has been considerably extended in wartime, and it seems probable that the success of the profession in handling these varied assignments may result in a wider field of practice in the fu-

ture. The problems of business management have been tremendously complicated by the network of wartime controls in the face of expanding volume, and shortage of managerial manpower has led many clients to turn to professional accountants for assistance. Conversion of industrial plants to high-volume production of wartime goods in the face of material and labor shortages has called for improved methods of production planning, allocations of materials, and inventory controls. Accountants have been asked to verify compliance with wartime rules for wage and salary stabilization, wages and hours regulations, price ceilings, and rationing procedures. They have assisted in negotiation and renegotiation of government contracts and have aided extensively in inspection, audit, and termination proceedings. Many special reports to the Office of Price Administration, the War Production Board, the Foreign Funds Control Unit, and other agencies have involved accounting and financial data. Independent auditing has been extended in the labor union field and among certain government-owned corporations. Practicing accountants have thus been gaining wider experience and new stature, and at the same time business management and government representatives have had opportunity to appraise the ability of the accountant when he is confronted with new situations. To the extent that the profession has had a measure of success, it may confidently anticipate future calls to meet the problems and controls which will face business in the postwar period of reconversion, readjustment, and reconstruction.

Enumeration of some of the government reports and controlling regulations with which we have been dealing leads me to mention a significant effect on the work of the professional accountant. The administrative needs of government bodies in connection with reports from business units

appear inevitably to lean towards standardization of form and treatment. As a result an unconscionable proportion of the practicing accountant's time is nowadays concerned with study of regulations and compliance with required form. Rules and regulations as to reporting are so numerous and in many cases so rigid that the accountant may find himself in danger of giving first attention to compliance therewith, to the detriment of adequate consideration of fundamental matters of principle and policy. Nor can the definitions and rules laboriously absorbed in one connection be carried over into another field of regulation. Definitions relating to corporate affiliations, for example, are very different in reports under the Securities Act of 1933, under the Public Utility Holding Company Act, and under Foreign Funds Control, to say nothing of the income tax regulations. The profession has frequently pointed out the dangers and weaknesses of excessive standardization and insistence on uniformity by regulatory bodies and has done its part under war conditions in the struggle to limit the number of questionnaires and reports demanded of business. However, one can as yet hardly discern much reversal of the trend. Let us hope for and continue to strive for its reversal after the emergency is over.

Such extensions of the accountant's zone of operations as have been mentioned may be expected to accelerate the development of his interest and participation in the more comprehensive fields of economics and governmental administration. Problems of the war's aftermath will indeed force these subjects on the attention of every thinking citizen, and the accountant will find in them many direct applications to his future work. Over-all renegotiation of war contracts and claims for excess profits tax relief are two examples, both of which involve concurrent consideration of

accounting factors and underlying economic and social judgments.

Again, the trend in this country away from the isolationist view in favor of world cooperation will stimulate interest in foreign trade, monetary exchange, and economic and social development of other regions of the world, all entailing accounting implications. Should a major price inflation develop, accountants may be faced with reappraisal of the validity of the cost principle in accounting for plant. Would the theory of "original cost" appear unrealistic in the face of a considerable rise in price levels and, if so, should accountants take the lead in consideration of the effects on public utility accounting and regulation? Settlement of lend-lease transactions and of the scrambled ownership of properties in enemy-occupied countries points to possible inadequacies of traditional accounting and legal controls over values and titles without reference to underlying economic equities and realities. Ration coupons in relation to individuals, like lend-lease between governments, have pointed to limitations of the "silly old dollar sign." The accountant should take an active interest in the future extent of government regulation and the relationship of government to business. He has been in a position during the last two decades to observe the weaknesses both of *laissez faire* and of bureaucratic controls, and he realizes that development of workable controls different from either of these traditional extremes will require vision and resolution, intelligence and understanding on the part of leaders in business, labor, and government.

The long-term trend has been to place increasing social responsibilities on the accounting profession by expanding its functions and giving increased emphasis to judicial independence in auditing work. As already suggested, the scope of professional problems has been broadening. Indications that society may place greater

reliance on the independent judgement and integrity of the profession are to be found in the tax proposals heretofore mentioned and in the extent to which governmental contracting agencies and renegotiation boards have relied on the work of accountants engaged by war contractors.

In conclusion, a brief word should be said as to the general bearing these thoughts may have on accounting education. The educator is always confronted with the question of where the emphasis in curriculum and instruction should be placed as between teaching accounting techniques and development of understanding of principles, policies, and underlying social sciences. Obviously, the man trained to recognize the significance of new

situations and to meet them on the basis of an experienced judgment and a command of basic principles has been a more useful member of the profession in wartime than the narrowly-trained technician. This is likely to be true also in years to come. While techniques will be improved and must be mastered by the successful accountant, the future leaders of the profession will require more than ever an understanding of the background of accounting in political economy, sociology, and ethics. It is to be hoped that accounting can be taught in such a way as to produce not mere theoreticians, but rather men who are practical because their practice is based on sound conceptions of underlying human relationships.

GENERAL PRINCIPLES OF COST ACCOUNTING

A. L. PRICKETT

COST accounting as such is of comparatively recent origin. It is not a fixed unchanging set of principles, practices, and procedures. Neither is there unanimity of opinion at this particular stage of development as to what is the best interpretation of many controversial issues. Nor, in many cases, is there available a single accepted definition of elementary and fundamental terms. The word "cost" itself is qualified commonly by scores of limiting but not exclusive adjectives, such as original, replacement, standard, imputed, first, total, marginal, out-of-pocket, appraised, new, depreciated, estimated, break-even, normal, budgeted, factory, unit, operation, distribution, departmental, fixed, variable, prime, direct shop, conversion, allowable or admissible, negotiated, and so on. Cost concepts are inter-

mingled with expense in general, with value concepts, with economic theory, with legal decisions and statutory expression, and with war emergency directives to the extent that basic cost accounting, if such there be, becomes increasingly difficult to untangle from the confused, related, but not identical strands.

For these reasons,¹ it is desirable to consider with some care what is included in "accepted principles of cost accounting," "generally recognized sound cost finding," "commonly approved cost methods," and other similar expressions frequently found in discussions of financial and general accounting, as though cost accounting long ago had been embodied in a simple set of

¹ See also Robert L. Dixon, "The Need for a Statement of the Principles Underlying Cost Accounting," *ACCOUNTING REVIEW*, July, 1943.

standards known to and accepted by all persons concerned and the whole subject could, therefore, be dismissed with a wave of the hand. It will be noted in numerous written expressions of past and current thinking that cost features have more often been ignored than treated, or that they have been passed over with the simple statement that costs are important and should be fair, reasonable, and "in accordance with generally accepted accounting principles and practices consistently applied"—a somewhat anomalous covering blanket.

One may, therefore, venture forth in search of these well-known, generally accepted principles and attempt to state some of them, travelling at his own risk. It is fitting that a schoolman should do so, because he can be forgiven for becoming involved in a percentage of error, whereas a practical everyday cost man or public practitioner would lose face under the same circumstances.

We may in the beginning restrict by choice the field to be considered as being the Cost of the Goods Manufactured, regardless of their physical location or ownership, neither of which elements should alter that cost figure. Accordingly, the expenses incident to the distribution of goods and to the handling of receivables, etc., lie outside the discussion.

It is not likely that anyone will become greatly excited over a first generalization that: Cost of Goods Manufactured equals Direct Material plus Direct Labor plus Overhead Expense. These terms are expressed as values but in each case are the product of quantities times prices. Questions arise both as to the quantities and as to the prices to be used. The primary objective in doing cost accounting work is to obtain reliable data for effective use; the secondary objective is to find the cost of the products made. Some persons do not believe that it is important to determine

the cost of the product but rather that correct product costs are inevitable if other viewpoints are the ones stressed. The formula mentioned above stresses the three cost elements and is probably accepted by a great majority of accountants, although not by all of them. Since few propositions are accepted one hundred per cent, those accountants who differ will have to be left to the more exclusive enjoyment of their personal convictions.

Before the meaning of the formula is pursued further, it is well to recognize that time is part and parcel of the cost of each element. Time is mathematically determinable with a satisfactory degree of accuracy. However, time must be cut into arbitrary lengths, and here there is disagreement. For cost purposes we have come to recognize the desirability of equal division. To express a carload of metal as 40 tons and yet have these tons composed of varying numbers of pounds would not be tolerated. With time also, division should give component parts of the same size. Thirteen months of four weeks each equals 52 weeks which multiplied by seven equals 364 days—roughly $1\frac{1}{4}$ days short of exact reality and one or two days short of present accepted calendars. Capricious tampering with the sidereal year should not become the basis for cost determination. Financial accounting on a monthly basis is inaccurate, but quarterly, semiannual, and annual statements avoid the difficulty in a reasonably satisfactory manner.

Further subdivision of time by units of a week encounters legal regulations expressed in hours. A norm or standard may be 40 hours (or in certain cases some other number). The customary seven-day week concept is seemingly erased and legal hours substituted. Then presumably one day of 24 hours plus the next 16 hours of the succeeding day might constitute a legal week. The traditional week of seven days of 24 hours each, or a total of 168 hours,

would equal $4\frac{1}{2}$ theoretical weeks. To avoid a breakdown of reason, cost accounting must adopt a standard workday and a standard work week for a given type of business. These standards are reduced to plant hours for budget purposes and overhead distribution. In labor-cost computations regular rates comply with the law and contractual agreements; and excess cost begins whenever time runs over the regular amount, the law determining what is one-half excess and what is double excess. Extra hours or designated days cause the differential.

For most purposes the hour is a satisfactory unit. Fractions of hours have caused difficulties. The former practice of considering any part of a half hour as a full half hour for tardiness is an illustration. Quarter hours or tenths of hours are more satisfactory. The principle remains that for practical purposes smaller units are not recognized in the payroll. However, for cost allocation a breakdown to tenths of hours, to minutes, or to hundredths of hours is mechanically expedient.

We may then generalize that: For cost purposes 13 months of four weeks each, one week of seven days comprising 40 work hours (or other figure by industries), one day of eight work hours (or other figure by industries), hour and quarter-hour units for pay roll, hours and tenths of hours for cost allocation, and minutes or fractions thereof for standard-setting are generally accepted time divisions. For overtime, clock time is converted to cost time by adding 50 per cent or 100 per cent, depending upon contractual or statutory requirements. The assumption here conforms to "Regulations on How to Keep Wage and Hour Records Under the Fair Labor Standards Act of 1938," and "Double Time Order #9240." The wage rate remains constant for total time worked. The excess is computed by multiplying the added time by the regular rate, and the excess cost due

to overtime is segregated. Changing of time units or lack of uniformity of practice within a given business distorts cost figures. Hence the expression "consistently applied" is vital to true cost determination.

Returning to the formula "Cost of Goods Manufactured equals Direct Material plus Direct Labor plus Overhead Expense," we may now examine the first item, Material. In order to know at all times the quantity of material purchased, received, issued, and on hand, a system is necessary which involves purchase orders, invoices, receiving reports, stores-control accounts and subsidiary stores cards, physical protection of stores, requisitions, and inventory audit. Loose handling of stores violates the cardinal principles of accountability and internal check. There are various methods of verification applicable to inventories of materials, work-in-process, and finished goods; these include detailed physical count, chemical analysis, inspection estimates, sampling, and averages by groups. The circumstances under which each method may legitimately be used are determined by the answers to three questions: First, which method gives the most accurate result? Second, which method is practicable, considering the nature of the goods inventoried and the method of handling? Third, what legal restrictions limit the choice? For example:

1. The physical count by unit, by weight, etc., is usually most accurate.
2. In-process goods in many cases are not subject to accurate differentiation and are determined by test or by assumption, based on accurate listing of completed production. Completely accurate inventory may result in destruction of the product, as would be the case where chemical analysis is necessary. One must then be content with sampling. The same situation exists with some raw materials, both as to their composition and as to usable quantity.
3. Complete physical inventory at one time may be forbidden by emergency ruling.

We may generalize that: Perpetual inventory as applied to direct materials is accepted as a satisfactory method of physical count for cost purposes. The periodic shut-down inventory has less support now than formerly on the grounds either of necessity or of expediency. Accordingly, perpetual inventory is correct procedure although it amounts to a continuous series of inventories with a changing list of items covering all items over an agreed-upon period, say three months for example, and never on any one date gives an absolutely correct total inventory. The auditor and balance-sheet accountant may not be satisfied but the cost accountant is. Their purposes are different and their viewpoints need agree no more than would those of two valuation experts, one determining values on a going-concern basis and the other on a liquidation basis.

When it comes to considering the dollar value of direct material received, issued, or on hand, the ramifications of theory and practice are much more complex. Men who put on halos as practical men use purely theoretical valuation with abandon in this area and do not worry too much about it. Even the hypothetical man in the hypothetical illustration sits uneasily between x and y in trying to determine the cost of materials in the four situations: opening inventory, purchases, issues, and closing inventory. If by any chance one doubts the inference, let him tabulate the literature on Materials. The quantity is amazing.

Issues of materials may be on one of the following principal bases: (a) average cost, (b) first-in, first-out, (c) last-in, first-out, (d) standard cost. The first three are the ones most commonly used and of these average cost is considered to be the best. The total cost of goods available (inventory plus purchases) is divided by the total number of units available to obtain a weighted average. This average changes

with each purchase; for each issue the average price in effect at that time is used. The costs fluctuate less under this method than under first-in, first-out or last-in, first-out, and are perhaps more favorable in the tax picture. Many favor the apparent actual cost figures derived by using (b) or the market values paralleling sales which are obtained under (c). In individual cases there appears to be some merit in their arguments. Neither group, however, is willing or able to follow its principle without variation or reserve, hedging in both rising and falling markets, and with returns and reissues representing a price series where original quantities have not been exhausted and later purchases made. Average cost is actual in total, but for the individual issue it is fictitious. Yet it is better than the other two methods under most circumstances and I should list it in the category of "generally accepted" practices. I know that the time honored original-cost theory of the Bureau of Internal Revenue will carry much weight in the accounting setup, but I do not concede that the tax-revenue viewpoint will necessarily coincide with good cost accounting. There are many instances and areas in which government agencies fail to reach the front lines in their thinking.

I believe that the best method of pricing material issues is undoubtedly standard cost, just as it is the best method of recording quantity issued. However, to say that pricing issues at standard cost is generally accepted procedure is to assume that standard costs have been generally accepted, which is by no means the case. Standard costs rank fourth among the methods in use, being applied by only a minority of companies, although the dollar value of products made by these companies is considerable. Before standard costs can be widely adopted, they must be more widely understood. They meet the requirements for effective managerial con-

control very well, which was stated as the number one objective of cost accounting. They represent what the product should cost and, together with the variances, show what it did cost and how the differences are classified. It may be that in due time standard costs may be listed as an accepted "must" for good management.

Beginning and closing inventories of materials should be on the same basis, whatever basis is adopted.

Costs chargeable to purchases of materials should include invoice costs plus incoming transportation, insurance, customs taxes and duties, and similar direct charges, in so far as they can be identified with the material. If they cannot be so directly identified, there is no point to forced artificial identification and they should be listed with other unidentifiable costs as part of the overhead. These incoming costs represent the creation of "place utility" and are a part of the value of the materials. Some persons go further and maintain that all costs of purchasing, storing, handling, and record-keeping connected with stores should be charged to Materials. Perhaps in theory that is a correct assumption, but difficulties arise in application which result in these departments being classed as service departments and thus the costs are distributed only indirectly. Interest on investment in material inventories is a part of the general discussion of "interest on investment as an element of cost," the whole of which has for some years been pretty thoroughly discredited. There seems to be little advantage now in doing other than let the sleeping dog lie.

Returns and allowances and trade discounts are proper deductions about which there is not so much controversy. Purchases discounts should be deducted in entirety, or on all amounts above a reasonable percentage for prompt payment, say one per cent, or not deducted at all. Un-

certainty of discount-taking seems to have carried too much weight in influencing practice. The cost accountant's interest in methods of finance is remote. Nor is he concerned with the amount of the charge except in so far as he may be responsible for part of the asset values upon which the expense is figured. We may generalize that: Correct procedure for cost accounting calls for listing material purchases net and letting financial accountants worry over what to do with the difference if discounts are or are not taken. In other words, the cost accountant is justified in assuming that the other areas of the business are well managed and he is not responsible for neglect therein. Here again I should naturally favor carrying materials at standard. Generally, allowance for shrinkage of materials, container cost, sampling, and laboratory expense are not included in material cost.

Inventory valuation reserves are set up for a variety of purposes, such as to convert cost to market, to convert standard or normal stock to market, to provide for shrinkage, obsolescence, or price fluctuation, to anticipate future losses, and to provide for taxes. Practice is confused because of the intermingling here of cost objectives and general accounting objectives. If the adjustment of value cannot be identified with specific inventory card records, a reserve is necessary to permit the control and subsidiary accounts to be in agreement. The charge is of particular interest to the cost accountant. Should it be made to overhead and included in the process and finished goods figures, should it appear as an adjustment of cost of goods sold, or should it be a debit to profit and loss? While this question cannot be answered in an entirely satisfactory manner on the basis of practice, it appears reasonable to generalize that: Certain charges such as normal shrinkage may properly be capitalized through overhead into goods

cost; charges for which the manufacturing management is responsible, such as excess spoilage not to be charged to the period of production, may be made to cost of goods sold; charges for which the general administration is responsible or which are not assignable to the factory, such as anticipated change of product or market decline, may be made to profit and loss.

Various methods of treating materials through standard costs are recognized, depending upon the time when standard figures are introduced and the way in which comparisons are made. Their general purposes are accepted as (1) recording materials in standard amounts and at standard prices, and (2) the segregating of quantity variances and price variances from costs at standard. Variances are closed to Cost of Sales, or to Profit and Loss. If the variances are prorated to work-in-process, finished goods, and cost of sales, these amounts are brought to actual; this is probably more in line with the thinking of the Bureau of Internal Revenue but less in line with strict standard cost theory.

The second item in the formula is Direct Labor, which by definition is considered as all labor performed directly on the product. To indicate the nature of such work it is sometimes referred to as productive labor; this terminology both clarifies and confuses. "Productive" eliminates other types of labor as soon as one knows exactly what "productive" means and the sense in which the word is used. "Shop labor" carries a clearer connotation. It is probably better to use the term "direct labor" and limit its meaning to the labor of those who actually make the product. Direct labor can be identified with the individual job.

"Explanation of Principles for Determination of Costs under Government Contracts" (the Green Book) states in Section 14: "It is recognized that complete uni-

formity in the definition of direct labor does not exist even within single industries." Efforts toward securing a better understanding are commendable.

Shop engineering wage expense includes the compensation of professional engineers, of other technicians, of draftsmen, and others, but these items should not be classed as direct labor. They are overhead expenses which in some cases can be assigned directly to a department, operation, or contract.

When it is impracticable to treat direct labor as direct (because of the inaccuracy involved or the clerical expense) the item is handled as an indirect cost.

Direct labor cost up to this point has been considered as related to a one-shift normal operation with no superimposed complications. In most companies such a situation does not exist today. Some of these added complications and the accepted practices applied thereto should be considered.

Overtime premiums paid to direct labor should not be charged to the jobs worked on during overtime hours but prorated as overhead over the entire period. The Fiscal Division, Headquarters Services of Supply, in discussing Army CPFF contracts stresses this principle. Cost accountants agree that those overtime premiums which are in the nature of normal cost expectation are properly included in the value of inventories as product costs. Excess overtime of a temporary nature caused by emergency is a period cost properly excluded from inventories and charged off to profit and loss. Practice is far from uniform, and questions arise as to the severity of losses in a period of price decline when inventories are inflated with excess overtime premium costs above normal expectation.

An NACA Research Study (Vol. 22, No. 24) showed that night-shift premiums were usually five or ten per cent of regular pay

and that third shifts enjoyed fifty to one hundred per cent more premium than second shifts. Multiple-shift premiums in practice tend to be included in direct labor or in overhead and are carried to the product. As in the case of overtime premium, the war has tended to influence practice whereas sound theory would lean toward charging multiple-shift premiums to profit and loss.

Employee training is always an item of some importance. Apprenticeship training was common practice before the war but naturally with the expanded production and the loss and turnover of industrial man power this cost has risen rapidly. While there was a prewar tendency to charge this item to profit and loss—an almost universal practice now—the cost has been considered as excess. However, the acceptance of such costs as normal would call for their inclusion as product costs through overhead.

Payroll taxes paid by the employer are large in amount and may be considered as a cost which will continue to be in effect for a long time to come and which will probably be at higher rather than lower rates. These taxes on direct labor may, therefore, be considered as normal and properly as a cost in addition to the basic labor rate. Companies which make single products, need no involved costing of individual jobs, and operate under a day-wage plan, should treat these taxes as direct. But few businesses are in a position to do so.

Pure theory is often modified by practical considerations so that a sound working principle suited to conditions at a particular time is developed. This is the case with the application of employers' payroll taxes. It is inadvisable to try to add these payroll tax rates to each hourly rate, piece rate on each job, process, or operation; accepted practice, therefore, is to include payroll taxes as an element of

overhead and prorate them over production. If overhead is apportioned on the basis of direct labor cost the results are accurate and the expense involved in maintaining the records is reduced to a minimum. To treat payroll taxes as administrative expense or as a charge to profit and loss, as is sometimes done, is not considered desirable (NACA, August 15, 1937).

Retroactive wage increases have occurred in recent years with a frequency calling for the adoption of an accepted procedure for handling. Whenever possible, such increases on direct labor are charged to direct labor. Otherwise they are generally absorbed through overhead. There are arguments for considering such costs as abnormal-period costs and charging them to cost of sales or profit and loss. The handling is influenced by the time when the increase goes into effect (that is, whether in the current or a subsequent period) and the resulting ease or difficulty of identification with product and possible recovery through sales, and by the accounting system in use and the extent, in the case of standard costs, to which all variances from a fixed standard are treated as period costs.

Vacation pay, if applicable to direct-labor workers who take the pay but not the vacation, is charged to overhead and becomes a product cost or, through profit and loss, a period cost. Such cost is not applicable to any particular job and is properly an overhead item. If social trends indicate permanence of vacation pay for direct laborers, it is not important, in determining the principle for handling, whether they continue to work during the vacation period and receive double pay, or take the vacation and receive pay based on average earnings or other agreed-upon amount. Since the cost is on an annual basis, the weight of reason would be in favor of a profit and loss charge.

The third element of cost, Overhead Ex-

pense, has long been recognized as the most difficult to allocate in a satisfactory manner. Direct material and direct labor were early separated from other costs because records and reality could be brought together. All other proper costs of manufacturing remained both to be determined and also to be distributed. Some of these items have been referred to briefly in connection with the discussion of direct material and direct labor.

Overhead is collected in detailed objective accounts, such as depreciation, compensation insurance, rent, fire insurance, property taxes, repairs to machinery, etc. Grouping is achieved through designating common characteristics such as fixed, variable, and semi-variable as to time; mixing, cooking, pouring, assembling, storeroom, cost and payroll, maintenance, etc., as to departmental function; controllable and uncontrollable as to operating responsibility; direct and indirect as to the number of allocations or reallocations necessary before actual expense reaches accounts in which it can be compared with predetermined, estimated amounts of like classification; actual and applied as to the degree to which historical costs are currently absorbed; and many other bases. Both the items and the groupings are open to re-examination and ultimately to more general agreement on content limits and best usage. Only a small part of the overhead problem will be examined at this time.

Some costs of production are not chargeable directly to the product. Ordinarily such items are regarded as overhead. The most common area of division ranges around an established or assumed normal and the over- and under-amounts not assignable directly to product cost, but absorbed as periodic adjustments through cost of goods sold or profit and loss. When operations fall considerably below normal it is apparent that not all of fixed overhead can be absorbed by the limited pro-

duction. Standard cost systems universally provide for such situations in the principles upon which the systems are based. Studies show the monthly variations as carried to profit and loss, but the annual variations go to cost of goods sold. Material-purchasing, issuing, and inventory-pricing policies reflect a desire to eliminate price-profits from costing. Similarly, excess direct labor costs are applied against current income. Excess labor costs applicable to indirect labor present a confused picture at the present time, colored by the tendency to charge everything possible to the job or contract. That tendency is to be expected in other overhead items also in wartime because of the nature of war production procedure and also because of the uncertainty of the length of the war period. A practice followed in emergency periods should not be assumed to be accepted practice for production in a period of peace, although some developments in abnormal times may carry through succeeding years and become common practice, thereby necessitating their inclusion in everyday costing. A considerable proportion of costing in wartime follows the same accepted principles as peacetime practice.

NACA, in August, 1941, published a study dealing in part with overhead application. This and related studies show volume of activity at normal ability to produce and sell to be the stated practice twice as often as expected actual is for the period. Volume may be measured in labor hours, machine hours, or units of product. In the ten-year period preceding the war, companies which used expected volume as a basis actually overestimated volume or underestimated expense to an extent that resulted in underabsorption of overhead in twenty-four per cent more company years than reflected overabsorption. Companies which employed normal capacity underabsorbed burden two and

six tenths company years for each company year they overabsorbed burden. Accordingly computed normal gave greater variation in company years experience than expected actual, although both estimates were in error in the same direction of optimism. Companies tended to increase the normal regardless of their absorption experience. It may be stated as a generally accepted principle that: Overhead rates should be based on normal ability to produce and sell over a period of years. The factors involved in determining that normal need further attention. (See "Practice in Applying Overhead and Calculating Normal Capacity," NACA Bulletin, Vol. 19, No. 15, April, 1938.)

In war periods capacity is likely not only to be greatly expanded but also to be utilized far beyond the expectation involved in the "normal" used to determine burden rates. Overhead will then be overabsorbed in amazing amounts if the rates remain unchanged. If the allowed cost recovers this overhead, profits will be excessive. If, on the other hand, the overabsorption is considered as offset against underabsorption of prior years with resulting reduction of profits, then some weight may be given to the overabsorption. This contention, although plausible, is not defensible, for although two errors may cancel each other, the cancellation does not justify the errors. Finally when differences are carried to profit and loss, there is the question of rates based on a norm which represents an arithmetic average of items of wide range as against a moving norm closely tied in with expected actual budget.

Absorption of overhead brings fresh problems if the company is engaged both in war production and in civilian production. In case the war contracts are cost-based, the government stipulation as to unallowable costs may load small non-war production with more overhead than it can bear. The excess should be carried to profit

and loss and covered by memorandum distribution to adjust apparent war profit to real profit on war contracts. On the other hand, certain items such as added plant guards and police, identification badges, uniforms, etc., are distributed only to war production.

War production sometimes causes a temporary shift in practice but not in principle. For example, rejects, reworks, and scrapped parts resulting from government contracts are charged directly to the job instead of to overhead to be spread over production. This change should be considered as facilitating reimbursement and renegotiation, and not as a change in accepted general procedure.

The change from standard and process costs to job costs is similarly not to be interpreted as a decision in favor of order costs, but rather as an indication of the adaptability of cost accountants to war regulations and conditions. In many instances, the companies which change their cost systems are making wartime products which are different from their peacetime lines.

Nonrecurring expenditures arising from wartime production raise interesting questions. Mr. R. P. Marple's report of April 15, 1943, gives a cross section of practice, as summarized below.

The original cost of protective installations ordinarily, unless a small item, would be capitalized and depreciated through overhead. This accepted procedure tends to persist, although the weight of practice is thrown to immediate absorption either during the first period or by the current contract, but still through overhead. Most companies spread the cost over all production, although some which produce both war and non-war items have considered the charge as necessitated only by the war production.

The same practices are found relative to space and fixed equipment for govern-

ment officials. Naturally, this expense caused by provision for auditors, inspectors, etc., shows a marked tendency to be assigned to war production. In connection with facilities for added employee training, the tendency is two to one in favor of making the charge to current production as overhead instead of capitalizing it. Here the war influence is pronounced. On the contrary, when it comes to expenditures for new washrooms, lockers, etc., for women workers, these amounts are more often capitalized and depreciated through overhead than absorbed currently by one method or another. Some companies capitalize the more durable items and charge the shorter-lived items, such as chairs and lockers, against the first contract. In the case of these facilities and others discussed, companies charge normal depreciation to product costs and the excess to profit and loss under certificates of necessity.

When the cost of rearranging and converting equipment to production for war contracts is not specifically allowed by contract, most accountants consider the expenditure as having but little value beyond the purpose of conversion and absorb it currently over the production for the period. The practice of writing such cost off as a direct charge to the first contract is increasingly favored.

Expenditures for war-product research ("costs incurred prior to decision that a marketable product has resulted"), if they can be identified with specific contracts, are so charged directly, but if such identification is difficult they are absorbed through overhead for the current period. Costs for engineering, drafting, and designing products under war contract are more frequently charged directly to the first contract than in the case of research, but the prevailing procedure is still to spread them over all current production of the period through overhead. Only in the case of special patterns, dies, jigs, tools,

molds, etc., required for war production is the direct first-contract charge overwhelmingly the practice. However, one-third of the companies investigated used the current period charge, predominantly as overhead.

It is interesting to note that research and development costs, if considered successful, are seldom capitalized. Special projects, large expenditures beyond normal expectations, and the development of new and special machinery are commonly capitalized. In the development of new products, improvement of existing products, and material testing, costs should be absorbed through overhead or direct product charge. Some companies view the first two types of costs as a separate charge to profit and loss, excluding them from manufacturing costs that run into inventories and from general administrative or selling expense. However, inclusion in manufacturing cost is the accepted procedure. The cost of pure research is one which might well be a current profit and loss charge or special charge, and the tendency is in that direction, although erroneous inclusion in overhead still predominates. The development of new manufacturing methods and the experimental testing of products are generally accepted as overhead items. Purchased patents and patent litigation are administrative charges though originally they may be capitalized. Royalties relating to specific products are naturally a direct product charge.

Although not consistently followed, it is a generally accepted principle that: Indirect costs applicable to current production should be included in the overhead of the period, and indirect costs not so applicable should be spread over future production as an element of cost, or if the applicability to production costs is too remote or too uncertain, be charged to profit and loss.

Many important problems involving the

principles and procedures of cost accounting have not been considered. The termination of war contracts when the war ends will involve cost principles of inclusion and exclusion, determination of applicable cost of uncompleted contracts on an inventory or on a total cost basis, loss allowance, consideration of cost of conversion from war to peace as a contract cost or a profit allocation to reserves, segregation of inventory costs, etc. Distinctions between costs for production and costs for cancellation have to be made. It is a generally accepted principle that: Profits from volume and profits from managerial skill and inventive talent should be differentiated, but much remains to be done in the application of techniques. Inflation and deflation of inventories of materials, in-process, and completed goods are pertinent considerations of the present and future. In the American Institute Bulletin No. 13, *Accounting for Special Reserves Arising Out of the War*, eleven purposes for which reserves may be provided are set forth. Each requires in principle careful differentiation between charges to product, to period, and to surplus.

Allowable and unallowable costs should be further studied from the viewpoint of general principles and special contractual application. Such precedents as T.D. 5000, the "Green Book," the manuals of procedure of the Army, the Navy, and the Maritime Commission regarding purchasing, auditing, and settlement, the General Accounting Office interpretations, and war and postwar experience in general will leave their imprint on cost principles and procedure of the future.

Many aspects of the problem of principle determination have been omitted from the discussion, including such as finished goods and in-process cost treatment; co-product, joint-product and by-product costs; costing in nonmanufacturing concerns and distribution costs.

The problem of cost principles resolves itself into three parts:

1. Agreement upon the more generally accepted principles in various areas of cost analysis as supported by theory and practice.
2. A statement of those principles in terms acceptable to cost accountants, public practitioners, and teachers.
3. A gradual expansion of the coverage of (1) and (2).

BIBLIOGRAPHY

American Institute of Accountants, "Examination of Financial Statements by Independent Public Accountants," January, 1936.

Bechtel, V. Richard, "Business Budgeting with a View to Conversion from Wartime to Peacetime Conditions," *N. A. C. A. Bulletin* of August 1, 1943, Section I, pages 1349 to 1375.

Bennett, Clinton W., "Some Problems of Wartime Industrial Accounting Control," *N. A. C. A. Bulletin* of July 1, 1943, Section I, pages 1261 to 1280.

Brink, Victor Z., "Auditing Problems Relating to Cost-Plus-A-Fixed-Fee Contracts," *The New York Certified Public Accountant* of February, 1943, pages 200 to 205.

Broad, Samuel J., "Termination of Contracts for the Convenience of the Government," *The New York Certified Public Accountant* of August, 1943, pages 450 to 458.

Committee on Accounting Procedure, American Institute of Accountants, "Accounting for Special Reserves Arising Out of the War," *Accounting Research Bulletins* of January, 1942, No. 13, pages 111 to 118.

Committee on Accounting Procedure, American Institute of Accountants, "Accounting under Cost-Plus-Fixed Fee Contracts," *Accounting Research Bulletins* of December, 1943, No. 19, pages 155 to 161.

Farrand, George N., "Effects of War on Financial Statements," *The New York Certified Public Accountant* of August, 1942, pages 587 to 594.

Gaa, Charles J., "Effect of Inventory Methods on Calculation of Profits and Income Taxes," *University of Illinois Bulletin*, 63.

Healey, Joseph P., "Some Practical Problems and Recent Developments in Costing Government Contracts," *N. A. C. A. Bulletin* of November 15, 1942, Section I, pages 305 to 323.

Lorig, A. N., "Valuing Inventories in Profit and Loss Determination," *the ACCOUNTING REVIEW* of July, 1943, pages 234 to 239.

McIntosh, Moore C., "Government Policies in Cost Definitions under Cost-Plus-Fixed-Fee Contracts," *N. A. C. A. Bulletin* of April 1, 1943, Section I, pages 891 to 901.

May, George O., "War and Accounting Procedures," Reprint from *The Journal of Accountancy* of May, 1942.

Nadler, Dr. Marcus, "War and the Possibility of Inflation," *The New York Certified Public Accountant* of January, 1942, pages 4 to 8.

Research and Technical Service Department, National Association of Cost Accountants, R. P. Marple, Director, "Practice in Accounting for Continuing Expenditures Arising from Wartime Production," *N. A. C. A. Bulletin* of April 1, 1943, Section III, pages 925 to 949.

Research and Technical Service Department, National Association of Cost Accountants, "Present-Day Practice in Accounting for Research and Development Costs," *N. A. C. A. Bulletin*, March 1, 1939, Section III, pages 889 to 909.

Research and Technical Service Department, National Association of Cost Accountants, R. P. Marple, Director, "Practice in Accounting for Non-Recurring Expenditures Arising from Wartime Production," *N. A. C. A. Bulletin*, of April 15, 1943, Section III, pages 1017 to 1043.

Research and Service Department, National Association of Cost Accountants, "Practice in Accounting for Raw Materials," *N. A. C. A. Bulletin* of March 15, 1937, Section I, pages 785 to 809.

Research and Technical Service Department, National Association of Cost Accountants, "Tentative Statement on Accounting for Excess Labor Costs," *N. A. C. A. Bulletin* of May 1, 1942, Section III, pages 1205 to 1213.

Research and Technical Service Department, National Association of Cost Accountants, R. P. Marple, Director, "Practice in Depreciation and Amortizing Investment in Machinery and Equipment," *N. A. C. A. Bulletin* of May 1, 1943, Section III, pages 1109 to 1122.

Research and Technical Service Department, National Association of Cost Accountants, "Practice in Accounting for Depreciation," *N. A. C. A. Bulletin* of April 15, 1941, Section III, pages 947 to 963.

Research and Technical Service Department, National Association of Cost Accountants, R. P. Marple, Director, "Accounting for Excess Labor Costs and Overhead under Conditions of Increased Production," *N. A. C. A. Bulletin* of August 15, 1941, Section III, pages 1551 to 1570.

Research and Technical Service Department, National Association of Cost Accountants, "Finished Goods Inventory Practice," *N. A. C. A. Bulletin* of March 15, 1940, Section III, pages 927 to 956.

Research and Technical Service Department, National Association of Cost Accountants, "Practice in Applying Overhead and Calculating Normal Capacity," *N. A. C. A. Bulletin* of April 1, 1938, Section III, pages 917 to 934.

Research and Technical Service Department, National Association of Cost Accountants, "Practice in Accounting for Taxes Paid by Manufacturing Companies," *N. A. C. A. Bulletin* of October 1, 1938, Section III, pages 179 to 208.

Research and Service Department, National Association of Cost Accountants, "Practice in Accounting for Payroll taxed," *N. A. C. A. Bulletin* of August 15, 1937, Section I, pages 1365 to 1391.

Russell, Donald M., "Control and Allocation of Expenses under Abnormal Conditions," *The New York Certified Public Accountant* of October, 1942, pages 17 to 28.

Schwenk, Otto G., "Use of Time Standards in Estimating War Contract Costs."

Scovill, Hiram T., "Wartime Accounting Problems," *THE ACCOUNTING REVIEW* of July 1943, pages 209 to 218.

Specthrie, Samuel Waldo, "The Distribution of Overhead Costs in Companies Handling Both Normal and War Contracts," *N. A. C. A. Bulletin* of December 15, 1942, Section I, pages 425 to 432.

Stempf, Victor H., "Inventory Principles and Practices," *The New York Certified Public Accountant* of June, 1943, pages 342 to 362.

Stempf, Victor H., "War Contracts, Costs, and Profits," *The New York Certified Public Accountant* of August, 1943, pages 432 to 441.

Taylor, Jacob B. Major, "Termination of Government Contracts," *The New York Certified Public Accountant* of August, 1943, pages 442 to 449.

Thompson, Max F., "Cost Estimating for Government Contracts," *N. A. C. A. Bulletin* of July 1, 1942, Section I, pages 1415 to 1428.

Towns, Charles H., "Some Wartime Problems of Public Accountants," *The New York Certified Public Accountant* of January, 1942, pages 9 to 15.

War Department and Navy Department, "Explanation of Principles for Determination of Costs under Government Contracts."

U. S. Department of Labor, Wage and Hour Division, "Regulation on How to Keep Wage and Hour Records under the Fair Labor Standards Act of 1938."

THE TEACHING OF COST ACCOUNTING

WYMAN P. FISKE

COST accounting has many of the characteristics of a stepchild. In the family of accounting instruction, emphasis has been placed upon training for professional public practice and financial accounting. In spite of the vast increase in the importance of the controllership function in industry, no correspondingly increased attention has been given to training for industrial accounting. There are not a half-dozen carefully planned controller-

ship programs in the country. Cost accounting courses are included in practically every accounting curriculum, but in too many cases they have not yet grown up to reflect the great developments of the art which accountants in industry have made during the last two decades. We in the academic field have followed rather than led. We have made far too few constructive contributions in the area, either in principles and techniques or in training

candidates for the practice of industrial accounting. I firmly believe that there is a great new area of opportunity to be found in training directly and primarily for industrial practice, if we can only give the same thought and attention to the needs for successful industrial control as are being given to the requirements for successful public practice. One of the first steps will be a re-examination of our courses in cost accounting, or—as I prefer to think of it—our courses in cost analysis.

HISTORICAL BACKGROUND

Cost accounting is still young as a branch of accounting. Common inclusion of cost accounting in the accounting curriculum is even more recent in origin. It is interesting to review briefly the development of cost accounting and cost accounting courses as a background of the present status of each and as a basis for anticipating the steps ahead. In this review can be found much of the explanation for the lag between the academic approach and actual industrial practice.

Some sort of cost analysis, or at least cost guessing, has always been necessary as a basis for inventories that are included in manufacturers' balance sheets. Inventory values have also been needed to determine profits on anything but the simplest cash basis, since that neglects both accruals and inventories. The early development of cost accounting is a record of attempts to determine product costs for inventory values. The resulting figures found some use in price schedules, but the analysis was made by factory accountants primarily for inventory purposes. This fact is important to remember, for it is still reflected in almost all our cost treatises and texts.

The really rapid development of cost analysis began with the requirements of accounting for cost-plus contracts in World War I. The first association of cost accountants was an association of men

concerned with cost-plus accounting. The National Association of Cost Accountants, now an association of well over 12,000 members, dates from 1919 and included as its charter members men who had been active in cost-plus accounting. In the next decade there were many new developments and much extension of practices previously limited to a few leaders. These included the concept and use of standard costs and great strides in budgeting. Then came the thirties. The requirements of those terrible years stretched the imagination of industrial accountants and resulted in an even greater surge of new principles and practices. The emphasis shifted from values to control of costs and operations. While the controllers' attention was still directed to this problem, the passage of the Robinson-Patman Act brought analysis for sales pricing to a prominent place before the footlights. The total result was the emergence of an entirely new body of concepts and principles. Too often these were buried in a practitioner's description of how he met a particular problem, but they were there to be recognized by those who wanted to see. It was truly a golden era in industrial accounting.

Now World War II is having its effects. Many have concluded that cost accounting is losing its position with the shift from an interest in cost to a pressure for production. This is not a sound appraisal of the situation. Even though carefully planned systems have been scrapped in some instances, the fundamental problems still remain. There are still inventories to be valued and contracts to be costed. Estimates have had to be made as a basis for bidding on totally new products. Except for the possible case of some cost-plus contracts, control of costs within contract prices is just as necessary as ever. Solvency must be maintained. Budgeting of the old type may be out, but when volumes balloon, financial planning assumes very

great importance. Business is being done in more than one case with a working capital equal to two weeks' pay roll. Nor can we forget the reports for the Federal government. With decreased available manpower, an increased demand for accounting is straining the imagination and capacity of every good industrial accountant.

As is always the case with every new profession or art that is accepted into academic circles, the earliest teachers were necessarily drawn from practitioners. These men had a background of business. They thought as businessmen rather than as teachers. While their analysis of specific situations was often of the highest order, their approach to the subject as a whole was descriptive rather than analytical. Many of the early texts were no more than descriptions of a particular installation the author had made. The material covered was usually limited to determination of factory costs. If an author had had experience with accounting problems caused by World War I, he might include an additional chapter or section on cost-plus contracts.

These early teachers were followed by a first generation of academically trained men who had studied under the practitioners. Problems were developed and teaching methods were adapted to the new area. Their texts, however, tended to follow the pattern of the first attempts. Then began the flow of new developments—standard costs, budgets, sales costing, and all the rest. These demanded inclusion in the course and in a textbook which was really up-to-date. Too many of the new topics did not fit into an outline which covered determination of factory costs. Sections on "Special Problems" began to appear. These sections expanded with industrial practice and with the interests of the author until there appeared special sections on individual special problems.

But there was never a really fundamentally new approach. Violent arguments over the practice of selling below cost (remember the NRA) showed a woeful lack of understanding of what cost is. There was a narrow adherence to the traditions of the past, in spite of the fact that those traditions were built up in analyzing a very particular problem—inventory values.

In recent years new material has begun to appear which reflects sounder analysis of actual practice. It is now possible to defend differential costs under some circumstances and still retain one's respectability. Economically valid and thoughtful studies of the problems of sound price analyses have been published. Much of this material has appeared in the form of articles published as bulletins of the National Association of Cost Accountants, the publications of which are a mine of valuable information. Much appears in the more recent texts as isolated chapters. But it all needs to be coordinated and gathered together as a consistent whole.

This, then, is where we are today. Our material reflects the uneven development of the subject matter. It places a vastly disproportional emphasis upon factory costs for inventory values and has resulted in a distortion of our understanding of the cost concept. However efficient our teaching methods may be, we are handicapping our students with a confused and uncoordinated approach to the subject. The best we can do is to give them a good foundation in cost bookkeeping and correct answers to series of problems. We are not equipping them to find with any assurance sound solutions to new problems.

THE AREA TO BE COVERED

The foregoing suggests that a brief re-examination of the area to be covered under cost accounting will be a profitable step in covering the topic. Accounting, as a broad subject, is a tool or service function

concerned with the accumulation and analysis, for the managing executives and for the various equities involved, of all the financial and operating information necessary to sound operation of, and intelligent dealings with, a business or other enterprise. Cost accounting (or cost analysis) may be broadly defined as the analytical study of costs, expenses, and income, and of factors affecting costs, expenses, and income. Since the controllership division includes all accounting activities in a particular enterprise, cost accounting is one division of controllership.

Cost accounting is fundamentally an analytical approach to the development of useful and necessary specialized management information. Techniques are only chosen methods of analysis and reports are a device to report results. Whether or not formal accounting routines and records are used is a matter of convenience and internal check. The reason I like the term *cost analysis* better than *cost accounting* is that the former carries a broader connotation and suggests the inclusion of studies and statistical analyses entirely outside the formal double-entry accounting records. Many of the recent developments in the field have been in the form of special studies and reports rather than additions to the routine records. It is important that we get the right perspective in this matter. Cost bookkeeping is an important technique, but only one of many techniques. Some cost information will inevitably get into the formal records, for the end-product of one of its principal analyses (product costs) is an essential element in the preparation of financial statements. Moreover, much of its basic data will be obtained from the financial accounts. Nevertheless, it takes only a short incursion into the field to demonstrate that the double-entry records would either become unbelievably complicated or actually fail of their purpose if an attempt were made to include all desirable

analyses within their compass. Furthermore, cost accountants must turn increasingly to other sources for data essential to many of their most valuable analyses and reports.

It is important also to remember that cost analysis has more than a single objective. While the industrial cost analyst is always concerned with the accumulation and detailed analysis of factory, marketing and administrative costs and expenses to provide information needed by operating executives, the uses for the information vary so widely as to constitute differing objectives. As a consequence the accountant may be called upon to study the same transactions from several different angles. He may arrive at conclusions which, if the differing objectives are not accepted, appear to be quite inconsistent. In this connection, there is the obvious example of prorations of indirect overhead, which are essential in the determination of product inventory values but fatal to cost control.

The uses for which cost information are needed may be roughly classified into four groups. This classification excludes the activities necessary to coordinate cost accounting with other controllership activities, such as the provision for adequate internal check. The first includes analyses and routines for the development of inventory values and the determination of profit or loss. This is the earliest objective of cost accounting. It will always be of first consequence and will continue to dominate the formal cost records and routines. The second group covers activities in the area of sales pricing and estimating. Recognition in recent years that sound inventory values are not necessarily a proper basis for sales pricing has given this group a new importance which is almost certain to increase. The depression of the thirties caused an expansion of the third group—current control of costs, organization, and investment. Ever-narrowing margins and

the social interest in profits insure the continued significance of this objective. The final group covers analyses to aid in operating and policy decisions. Solving these problems often involves making selections from alternatives in which many routine cost figures are valueless. An example is the choice between two new proposed processes for the manufacture of a chemical product.

One of the first difficulties met in teaching cost accounting is the fact that there is not even a single fundamental definition or idea of "cost" which will meet all requirements. "Cost" has many different meanings, with only an extremely indefinite unifying idea to justify the application of the same term in such widely varying senses. The economist has long recognized this fact and carefully differentiates the different meanings he attaches to the word. In their early gropings toward the development of a new art, cost accountants tried to determine the one and only actual cost. So long as the objective was product costs for inventories, differences in definition were principally in details, although some pretty hot arguments were developed over such items as interest. When attention was turned to other problems, new ideas were necessarily introduced and accepted. New concepts and principles were involved, although they were not always recognized as such.

The basic business approach to cost was one of financial outlay. As developed by accountants, the businessman's primary idea of cost has been one of a normal average amount, determined as the sum of an accumulation of direct factory outlays and of a reasonable proration of indirect factory outlays. By outlay he means actual use or consumption of goods or services for which he has paid or is obligated to pay cash. He excludes completely the use of "free" goods and services which involve neither current payment nor past invest-

ment. His cost also ordinarily excludes any element to cover either direct or indirect sales and administrative outlays. Since he looks upon interest as a financial administrative expense, there is no recognition even of interest paid on borrowed money.

This concept of cost has three characteristics. It recognizes only actual outlays, but not all outlays. It is a historical figure. It is typical not only because of this, but also because it reflects, to an important extent, long-term rather than short-term costs. Each of these three attributes presents distinct advantages which have led to its recognition in the concept. At the same time each of them sharply limits the business usefulness of the total concept in many situations. Current replacement values are in many cases a better basis for price-setting than outlay cost of inventory items. Sunk costs, which represent an actual outlay, can be neglected in a short-term decision as to whether one should make or buy. In some circumstances it is certainly good business to make sales on something nearer to a differential cost than to a prorated cost. Normal and standard costs are a departure from a concept of actual outlay.

These are but a few of the cases in which businessmen and accountants have thrown overboard the old idea of cost and have adopted new ones far better adapted to the situations faced. The new concepts show an increased recognition of the applied economic problems which make business what it is. In the 'thirties budgetary developments, particularly in the case of variable budgets, produced an improved understanding of the cost characteristics of particular industries and of the reactions of cost to conditions of varying volume. Publications prepared by practicing industrial accountants are full of descriptions of new analytical methods and new procedures which reflect the new cost concepts. Recent texts and treatises also in-

clude such descriptions, but generally fall short of analyzing the practices to develop a consistent, coördinated body of principles. To read the texts one would still too often get the impression that there is only one cost: that determined by adding to direct material and labor a proper proportion of prorated overhead. This is in spite of the fact that if any one thing has become clear in this field, it is that there is no single cost concept or analytical approach which can possibly satisfy all the needs of management for accounting and operating information.

AN APPROACH TO THE TEACHING OF COST ACCOUNTING

How, then, should we approach the teaching of cost accounting? Certainly, unless we plan to train only cost clerks and cost bookkeepers, we should lay out a course which is more than a course in procedures and bookkeeping records. To be sure, these form a necessary part of the training, for they are the technique with which industrial cost accountants work. But they are only techniques. The greatest emphasis must be upon a consistent, co-ordinated set of concepts, principles, and analytical approaches. The techniques must take the same place in cost courses that bookkeeping does in financial accounting courses. Once this is done we can really approach the problem of teaching cost accounting.

It must be pointed out that a major part of the training for cost accounting must be given outside the cost accounting courses. Cost accounting is a service tool. It provides operating and policy information to production, sales, and administrative executives. The quality of its service depends upon the understanding by cost accountants of the problems and needs of the operating departments. Many controllers feel that for training as cost accountants they would prefer men drawn from produc-

tion activities to "book-trained" cost accountants. The reason is that most so-called "book-trained" cost men have neither a background of education in production, sales, and administrative problems, nor any shop experience. If we expect our graduates to progress as rapidly as possible, we must require or recommend courses in production and in business problems as well as courses in accounting. It pays to remember that it is far easier for industry to give men training in the techniques of cost accounting than to make up for any deficiency in general background or in cost principles.

The earlier review of the development and field of cost accounting clearly points a question at the content of our cost courses. The basis must be a sound grounding in the economics of costs and in cost concepts. Such an organized treatment of these two topics will be an innovation in most cost courses, but it is a necessary innovation. Time for it will have to be taken from that devoted to descriptions of procedures or to bookkeeping techniques. The result, however, is certain to be a strengthening of the course.

After a firm foundation of theory there can be introduced first a study of the application of the cost concepts to the various objectives which cost accounting attempts to meet. In this way a sound analytical approach can be developed and the student can be taught how to approach new problems. Unless the analysis is correct, the routines decided upon are bound to be deficient in results or even to fail utterly. What kinds of costs and what type of analyses, for example, will be most useful in helping the sales department set sound prices? Thought and study as to the various alternatives available must precede any actual analyses and reports designed to meet this problem. We should teach the student to think for himself, rather than merely give him what we con-

sider at the moment to be the best practice.

The next topics, which may possibly be developed concurrently with the preceding (they must be kept distinct, however) are cost records and cost procedures. At this point the relation of cost accounting to financial accounting and to audit protection can best be developed. In this way a proper choice between incorporation into the double-entry system of accounts, a tie-in with the financial records, and totally independent studies can be intelligently made. The procedures developed can also provide for an adequate internal check. The student will need an understanding of all the technical tools available, but he must also learn that tools can be no substitute for intelligence and imagination.

Problems of sound reporting are included in most courses, and properly so. There is an area here, too, which needs further development, not only in our teaching but also in practice. That is the use and follow-up of cost reports. At this point cost accountants come into close and intimate contact with operating executives. Their total success will depend in large part upon success here. Our graduates will need any help we can give them.

For methods we have available all the familiar teaching devices. We can use lectures, problems, cases, assigned reading, field trips, and the laboratory. Each is useful and can have a place in an efficient educational program. Laboratory problems are particularly helpful in teaching techniques. Field trips can be used to teach routines and show actual working conditions. Cases can be used, along with other devices, to develop the analytical abilities of maturer students. To some extent the choice is as personal to the instructor as all good teaching ultimately is. To some extent it will depend on the maturity and experience of the students. Teaching method is a pedagogical prob-

lem. It is important, but less important to the development of better cost accounting instruction than is a re-examination of, and improvement in, course content and layout.

The future of industrial cost analysis is bright, for it is a vitally essential business service. It has shown and can be expected to continue to show a rapid development in the quality of its service to industry. There is a need for better-trained juniors to enter cost accounting as a career. That is our opportunity as teachers. But to succeed we must carefully restudy the problem and redesign our courses, not only to include latest practice, but more importantly to include a sound basis of consistent, coordinated cost concepts and analytical principles. New and better teaching material will be required. We can contribute much not only in this direction, but also in the analysis of practices to uncover the underlying principles. It is a big job that needs to be done; but I am sure we shall meet the challenge.

Possible Outline for Cost Course
(Minimum time requirement—one year)

- I. The field of cost accounting
- II. General concepts
 - A. The meaning of cost—an over-all approach
 - B. Different cost concepts
 1. Prorated financial outlay
 2. Non-outlay cost
 3. Differential cost
 4. Joint cost
 5. Normal cost
 - C. Cost characteristics of industry—an economic approach
- III. Principles of cost analysis
 - A. Inventory values and profit
 1. Cost plans
 2. Direct costs
 3. Manufacturing expense
 - B. Control of expenses
 - C. Control of investments
 - D. Costs for sales pricing and estimating
 - E. Operating and policy problems—selection from among alternatives
 - F. Coordination with other controllership activities—internal check
- IV. Cost bookkeeping
 - A. Factory ledger control and tie-in of cost records
 - B. Manufacturing accounts
 - C. Accumulation and analysis in the records
 - D. Standard costs and variances
 - E. Mechanical aids

- V. Cost routines
A. Inventory records
B. Payroll records
C. Overhead records
D. Sales records

- E. Internal audit procedures
F. Budget procedures
G. Cost reports and their follow-up
H. Plant records and accounting
VI. Costs and the governmental control of business

AN APPROACH TO FINANCIAL STATEMENT ANALYSIS

ROBERT G. ALLYN

WHEN confronted with the prospect of analyzing a financial statement, whether it be a profit and loss statement or a balance sheet, the accounting student is usually perplexed as to where and how to begin. With these questions in mind, the writer would like to suggest a plan of attack which has been tried out for several years in courses in Credit Management and Mathematics of Accounting.

At the outset, it will be helpful to the student if he is oriented with the proper viewpoint and attitude of mind toward the problems involved in statement analysis. What persons are interested in financial statement analysis? Of what value is such information? To choose only a few pertinent examples, the following are representative of those who use the financial statement as a necessary tool in the conduct of their daily commercial activities.

The public accountant and the company auditor, for instance, and possibly the firm's bookkeeper, have a twofold task at the end of the fiscal period: that of preparing financial statements and that of analyzing them by means of ratios and percentages.¹ These results, arranged in proper form, are then submitted to the

executive, who upon comparison with figures for former periods calculates trends of income, cost, tendencies toward overexpansion, overtrading, and many other problems of business management. Then too, if the statements submitted are those of a corporate form of business enterprise with stocks or bonds to market, the Securities and Exchange Commission, as well as local and national stock exchanges, requires certified financial statements. In that connection searching questions are asked with reference to the figures submitted.

Likewise, if an employer is negotiating for a loan from his bank for working capital or expansion purposes, the banker requires that he fill out a form in which he lays bare the financial structure of his business. On the basis of this application, in addition to certain character requirements, the loan is granted or refused. Virtually all commercial loans made to business firms today are made on the basis of financial statement analysis and personal interviews.

Lastly, and ever increasing in importance, is the use of the financial statement by credit grantors, particularly in the fields of merchandising, wholesaling, and manufacturing. Gradually such institutions as the National Association of Credit Men and Dun and Bradstreet have broken down the reluctance of business houses to disclose their financial condition in order

¹ Cf. Guthmann, Harry G., Chapter I, "The Place of Financial Statements in Modern Business," *The Analysis of Financial Statements* (New York: Prentice-Hall, Inc., 1935); also Clark, Norman, "Teaching Analysis of Financial Statements," *The Balance Sheet*, Vol. XXII, No. 8 (April, 1941).

to secure account credit. The passage of uniform false-statements laws, furthermore, has made the financial statement a more reliable source of credit information; it is now possible for credit men to analyze financial statements without fear of being deceived.³

Reviewing briefly, it should be noted that each of the above analysts has a different point of view toward the figures before him. The investor wants to know how much the firm's earnings are, whether they are stable, and whether his investment will pay him a satisfactory income. The banker must be certain that the loan of his depositors' money will be safe and promptly repaid upon maturity. The credit man wants to be certain that the amount of credit granted will be remitted at the expiration of the terms of sale.

To achieve these ends, each of the above-named persons will focus his attention upon a different aspect of the financial statement. Inasmuch as the balance sheet is the more commonly referred to and usually the more accessible, it will be used to illustrate the method of approach to financial statement analysis as outlined below. In order to shorten the illustration and make the remarks less general, the illustration will be narrowed down to that of credit analysis. Other interested parties, it is hoped, may find in the following suggestions a general pattern to aid them in the solution of their problems of financial statement analysis.

To begin, the credit grantor analyzes the figures submitted to him for credit extension primarily to learn something of the debt-paying power of his firm's prospective customers. He is concerned less, if at all, with fixed asset valuation and the possibili-

ties of a cash settlement through insolvency proceedings. Consequently, his scrutiny is centered upon that portion of the balance sheet which will reveal to him the working capital condition of his prospective customers. Mentally, he draws a line separating the current assets and liabilities from the fixed assets, liabilities, and capital accounts.⁴ He does this because he knows that the payment of his firm's purchase invoices is dependent mainly upon the liquidity of his customers' working capital, rather than upon the accessibility of their fixed capital. Experience and statistics have shown him that insolvency and bankruptcy proceedings rarely yield more than ten per cent of the creditor's claims.⁴ In other words, the credit grantor invariably expects payment from the normal circulation of his customers' current assets. If a firm is to avoid the jeopardizing of its own credit standing by not paying its bills on time, the debt-paying power of its present and prospective customers must be carefully watched. More than once, an over-optimistic sales policy culminating in uncollectible accounts receivable has placed an otherwise financially sound concern in an insolvent condition.

The credit grantor hopes that when he has concluded his analysis, he will be able to answer two questions: Shall he grant credit? How much credit can he safely grant? It is with these two questions in mind that the following method of approach is suggested:

After he has segregated the current portion of the balance sheet from the fixed, it is advisable that the credit investigator evaluate roughly the prospective custom-

³ For an interesting and enlightening analysis of another problem of financial statement reliability, namely, completeness and adherence to standards of form, nomenclature, etc., cf. Foulke, Roy A., *The Balance Sheet of the Future* (New York: Dun and Bradstreet, Inc., 1941).

⁴ The expression "working capital" as used here means the net current assets. An explanation of working capital and its sources is to be found in Bonneville, J. H. and Dewey, L. E., *Organizing and Financing Business* (Rev. ed.; New York: Prentice-Hall, Inc., 1938), Ch. XIV.

⁴ Beckman, T. N., *Credits and Collections in Theory and Practice* (4th ed.; New York: McGraw-Hill Book Company, Inc., 1939), pp. 552-553.

er's itemized current assets and liabilities to determine their worth. Since "window dressing" the balance sheet is still common practice among unethical businessmen, the credit man should attempt to look behind the titles and amounts of the accounts listed to determine whether some of the items are intangible, deferred, doubtful, worthless, or out of proportion. A local credit man associated with a nationally known manufacturer of paints once told the writer that he looks suspiciously upon a large item of cash. A disproportionately large amount of cash indicates, in his opinion, either ultra-conservatism or liquidation of assets. Many credit men commonly and arbitrarily scale down the receivables and inventories by fixed percentages to allow for bad debts and stale merchandise. They often vary their percentages of discount with the season of the year, market conditions, and the type of business.

After making an approximation of the value of the current assets and the current liabilities, the credit analyst next applies the test of ratios as found in the relationships existing among the various items of the balance sheet. As the liquidity of the working capital is of paramount importance in the mind of the analyst, he should compare that figure with the inventory. The use of this ratio has tended to discourage the popular use of the "current ratio," i.e., the ratio between current assets and current liabilities; although a firm has two dollars of current assets for every dollar of current liabilities, the margin of one hundred per cent over the debts owed loses its importance when it is discovered, for example, that fifty per cent or more of the net current assets is tied up in inventory. This condition is especially a cause for apprehension if the balance sheet is dated at the end of the subject firm's fiscal year, a time when inventories are usually low.

A further test of the liquidity of the

working capital is found in the merchandise turnover, i.e., the cost of goods sold divided by the average inventory. If this figure is low in comparison with average figures,⁵ then a definite condition of overtrading is indicated. This is a condition of overbuying engendered by optimism that is caused in turn, perhaps, by rising price levels or failure to diagnose correctly the market demand.⁶ Contributory causes may be unwise purchases, inability to meet competition, lagging sales policies, or cyclical changes. Comparison of the merchandise turnover with the ratio of working capital to inventory provides the analyst with a fairly clear picture of the subject firm's debt-paying capacity.

These two ratios, however, reveal only the ultimate possibility of income through future sales. The analyst, on the other hand, wants further assurance of the presence of current income and its availability as a fund to reduce current indebtedness, particularly to the analyst's own company. A partial insight into these questions is brought out by a comparison of the receivables with the sales, the current debt with the sales, and the dollar assets with the current debt.

The third ratio, that of receivables to sales,⁷ is found by dividing the receivables by the daily sales. The result is the average collection period of the outstanding receivables. If this figure, expressed in days, is compared with the terms of sale customarily extended among the trade in the particular line of business, the analyst is able to estimate roughly how long he will have to wait for the final phase of the cycle of income to be completed.

⁵ Cf. Foulke, Roy A., "Appendix," *They Said It With Inventories* (New York: Dun and Bradstreet, Inc., 1939).

⁶ Cf. Hansen, Alvin, Part IV, "The Economic Outlook," *Full Recovery or Stagnation?* (New York: W. W. Norton and Company, Inc., 1938).

⁷ This ratio and others not presented in this paper are well described in Finney, H. A., *Principles of Accounting, Intermediate* (Rev. ed.; New York: Prentice-Hall, Inc., 1934), Ch. 25-28.

The fourth ratio, that of the current debt divided by the monthly sales minus the average monthly expenses,⁸ indicates approximately how long a business would require to retire its present current debt, assuming that sales will continue to be made at the same volume. By comparing this ratio with the ratio of receivables to sales and with that of dollar assets (cash and receivables) to current debt, the analyst is in a position to gauge the future prospects of the subject firm's creditors, both present and future.

Finally, some credit men suggest a comparison of net worth with total debt in order to detect the possibility of impending creditor control. In the majority of merchandising and personal service firms, other than utilities and transportation companies, a one-to-one ratio of debt to worth is cause for alarm, indicating that the creditors have an equity in the firm equal to that of the management.⁹

In conclusion, the writer would like to remind students of financial statement analysis that the above ratios, briefly outlined, are only a few of the many ratios used by credit men and business men, in general. One authority, has outlined fourteen ratios which he considers significant in the analysis of profit and loss statements and balance sheets.¹⁰ Moreover, the field of financial statement analysis has been widened by recent studies in the weighting of ratios.¹¹ Obviously, some ratios are more important than others. Any research, therefore, which can add anything to the fascinating and analytical subject of financial statement analysis is much to be desired.

To illustrate the procedure described above, the following example is offered. The comparative statements quoted below

were actually presented for credit purposes by a manufacturer of an article of men's clothing. The firm name and the years are fictitious.

THE XYZ COMPANY
COMPARATIVE BALANCE SHEETS FOR YEARS
ENDING DEC. 31, 1940-1941

	Dec. 31, 1940	Dec. 31, 1941
Cash.....	\$ 3,697.36	\$ 10,274.54
Accounts Receivable....	274,322.30	241,912.20
Merchandise.....	84,613.29	49,163.53
Total Current Assets....	\$362,632.95	\$301,350.27
Fixed Assets.....	12,442.46	11,164.35
Misc. Receivables.....	840.00	721.67
Prepaid or Deferred Items.....	601.19	542.62
Total Assets.....	\$376,516.60	\$313,778.91
Bills Payable (Bank)....	\$ 49,607.86	\$ 25,000.00
Bills Payable (Other)...	8,278.51	—
Accounts Payable.....	58,080.54	34,577.65
Accruals.....	19,252.04	19,366.55
Loans Payable.....	—	30,000.00
Total Current Liabilities	\$135,218.95	\$108,944.20
Loans—Not Current....	35,000.00	35,000.00
Net Worth.....	206,297.65	169,834.71
Total Liabilities and Net Worth.....	\$376,516.60	\$313,778.91
Sales.....	\$995,267.59	\$962,514.90
Net Profits.....	(a) 2,283.77	(a) 2,407.62
Withdrawals.....	None	34,055.32
(a) Net Loss.		

RATIO ANALYSIS

A. Preliminary Analysis: In studying the items listed in the balance sheets, one is impressed with the relatively large size of the accounts receivable. However, since the statements were submitted as of December 31, the end of the holiday season, a possible explanation is found for the disproportionate size of this item as compared with the other balance-sheet figures. As the firm is a manufacturer of men's wearing apparel, an unusually large volume of business could be expected during the month of December, resulting in small inventories and large accounts receivable at the end of the firm's fiscal year. Since

⁸ Guthman, *op. cit.*, p. 117.

⁹ Foulke, Roy A., *Behind the Scenes of Business* (New York: Dun and Bradstreet, Inc., 1935), p. 43.

¹⁰ *Ibid.*, Appendix, pp. 144-153.

¹¹ Beckman, *op. cit.*, p. 311.

B. Ratio of Working Capital to Inventory:¹²

	1940	1941
Current Assets.....	\$362,632	\$301,350
Current Liabilities.....	135,218	108,944
Working Capital.....	(a) \$227,414	\$192,406
Inventory.....	(b) 84,613	49,163
Ratio (b) ÷ (a).....	37.2%	25.5%

C. Merchandise Turnover:

Sales ¹³	(a) \$995,267	\$962,514
Inventory.....	(b) 84,613	49,163
Ratio (a) ÷ (b).....	11 times	19 times

D. Ratio of Accounts Receivable to Sales:

Accounts Receivable.....	\$274,322	\$241,912
Less 10% ¹⁴	27,432	24,191
Accounts (estimated good).....	(a) \$246,908	\$217,721
Daily Sales:		
\$995,267 ÷ 365 (approx.).....	(b) \$ 2,726	
\$962,514 ÷ 365 (approx.).....	(b) \$ 2,637	
Ratio (a) ÷ (b).....	90 days	82 days

E. Ratio of Current Liabilities to Monthly Sales:

Current Liabilities.....	(a) \$135,218	\$108,944
Monthly Sales:		
\$995,267 ÷ 12 (approx.).....	(b) \$ 82,938	
\$962,514 ÷ 12 (approx.).....	(b) \$ 80,209	
Ratio (a) ÷ (b).....	1.6 mo.	1.3 mo.

F. Ratio of Net Worth to Total Liabilities:

Net Worth.....	(b) \$206,297	\$169,834
Total Liabilities.....	(b) 170,218	143,944
Ratio (a) ÷ (b).....	1.21	1.18

sales terms range from 30 to 60 days, the accounts receivable would not show a substantial decrease until January and February.

It is observed that no apparent provision has been made for Reserves for Bad Debts or Depreciation. The credit grantor should therefore discount the receivables by approximately 10 per cent to allow for possible shrinkage. The decrease in the fixed assets, on the other hand, between the years 1940 and 1941 could be interpreted to mean that the fixed assets are given as a net figure, minus depreciation.

¹² Computations are based upon dollar values, cents being omitted.

¹³ Sales figures are used instead of cost of sales, data for the latter not being available.

¹⁴ An arbitrary discount of 10 per cent has been used.

Supplemental data given disclose that this firm is a limited partnership.

G. *Conclusions:* Although the working capital decreased between 1940 and 1941, the working capital condition improved. In keeping with the decline in sales of approximately 3 per cent, inventories also decreased. At the end of 1941, only 25 per cent of the working capital was tied up in inventories compared with 37 per cent in 1940.

The improvement in working capital is also reflected in an increase in the number of turnovers of merchandise from an average of 11 times a year to 19 times. Turnover figures compare favorably with those published for similar lines of business.

Accounts receivable also declined along

with the volume of business. Relative ages of receivables showed an improvement from 90 days sales outstanding to 82 days.

In addition to the improvement in the current assets, current liabilities showed proportionate decreases. If the sales volume should continue at the same level, the liquidation of obligations should be expected in a much shorter period of time.

Finally, in comparing net worth with

total liabilities, it is observed that the relative equities of management and creditors have remained almost the same. The slightly unfavorable showing was due, according to supplemental data given by the firm, to the withdrawal of one of the partners. If there had been no change in personnel, the net worth position would have shown an improvement over the calculated figure of 1.18.

THE ACCOUNTING EXCHANGE

A. C. LITTLETON

PACIOLO. In scholarly work with medieval materials small details of spelling may later prove to be important to someone. Hence the ACCOUNTING REVIEW reports two typographical errors in the January, 1944, issue. On page 68, footnote 2, *geometiia* should be *geometria*; on page 74, third line, column 2, *invariata* should be *invariate*.

Selection of Personnel. Committees of the American Institute of Accountants that have been studying the problems of selecting professional personnel have recommended, and the Executive Committee has adopted, a plan for engaging in an extended research project in this connection. The following extracts from a circular letter to members of the Institute give a compact view of the proposal.

"The purpose is to find answers to the following questions:

"1. What if anything can be done to encourage young men with the proper intellectual and personal qualifications to study accounting, with a view to entering the profession?

"2. What if anything can be done to discourage young men who lack the proper intellectual and personal qualifications from attempting to qualify themselves for the profession?

"3. What if anything can be done to assist professional certified public accountants in composing applicants for staff positions who are well qualified for public accounting work?

"4. What if anything can be done to encourage colleges and universities to train men specifically for public accounting as contrasted with other types of accounting work?

"The Institute committees have been convinced that the first step in answering these questions must be to develop measures and procedures which may show within reasonable limits of accuracy the extent to which an individual possesses the personal qualities, as well as the technical ability, which make for success in accountancy.

"The project as planned includes the construction of experimental tests, or the adaptation of existing tests, based on a study of apparent pro-

fessional requirements. These tests will be validated by application to a substantial number of successful practitioners of accounting. The revised tests will later be applied to a larger number of students of accounting, and case histories of those students will be maintained for a period to indicate the validity of the earlier predictions.

"The Executive Committee freely recognizes that the work may be inconclusive, but it believes that the possibility of extremely valuable results, leading to improvement of the personnel of the accounting profession, is sufficient to justify the effort. If the present experiment is successful it will be worth many times its cost. If not, it may indicate further steps which may be taken toward the objective."

The usefulness to teachers of the results of aptitude tests given to their students may easily prove greater than might at first be expected. If a school must limit its enrollment, objective measurements of learning capacity would be a helpful addition to the evidence afforded by previous classroom grades. If students are found intent upon entering a program of study for which they clearly are unsuited, they would undoubtedly appreciate learning that fact even though it might not deter them. If after the war the practice should be extended of admitting to college numerous students who had not completed the usual entrance requirements, the usefulness of such testing procedures is obvious.

There are several reasons for thinking that teachers of accounting and the colleges of commerce generally should be glad to cooperate in this experiment wherever it is feasible to do so. Intelligence tests have been in use for some time in connection with college entrance examinations; and their extensive use in Army personnel work is well known. But they have not yet had an extended application to the professions, where they may ultimately prove to be equally valuable. However, there are

enough favorable opinions growing out of experience with these testing procedures in the fields of medicine and law to justify experimenting in the profession of public accounting also. It would be an advantage to teachers, as well as to practitioners, to recognize and measure if possible the qualities most desired of the accounting novice.

But there are difficulties, objections, and limitations, as well as promise, in the plan. Results may be a long time on the way. When they are available, they cannot reasonably be expected to show a figure or state a word which will admit a student to college or enter a graduate into the staff of a public accounting firm. Other data—scholastic record, college activities, business experience, interview impressions, opinions of friends—will be as important as ever. Furthermore, a man of great promise may prove upon trial utterly irresponsible; a man of only fair promise may, if given a chance, make good from sheer hard work. A real liking for a subject of study or for a line of work after a trial may yet turn out to be the most significant clue of all.

Yet difficulties and limitations need not be deterrents; they may be merely pointing to advisable detours. There is reason for hope even in the face of objections. Even though the tests cannot measure a determination to succeed or uncover a streak of laziness, a knowledge of the facts about one's talents could still be a useful guide to the exercise of will power in the one case, and might in the other be the very thing needed to awaken a sense of self-responsibility. It may be argued that knowledge of his aptitudes would tend to point the student toward an unwise degree of specialization and away from needed cultural and disciplinary studies. But it is doubtful that this result would follow the testing unless the belief was already held that high specialization was advantageous.

In spite of these and other possible ob-

jections, agreement will undoubtedly be general that the project is worth following to a conclusion, whatever that may be. The *Journal of Accountancy* points out editorially that many practitioners and teachers are enthusiastic; that some of both groups are skeptical; and that the not inconsiderable financial support given by the Institute Foundation is evidence that the profession is interested in improving its future personnel.

The schools, too, are interested. Teachers will feel that they want to have a part in every effort to reduce staff turnover and instability of employment, since these conditions are matters of concern to every accounting major in school.

The Junior Assistant. To the accounting teacher, "junior assistant" means the next port of call for many of his students who have for a time been in the state called "accounting majors." To the man himself the phrase means a port of embarkation—the beginning of a long voyage, long anticipated. To the employing public accountant, the man is an "assistant," useful in performing many necessary details, and a "junior" from the fact that he is under training and observation.

Qualifications for a career in public accounting have often been discussed in the periodical literature. But seldom has consideration been specifically given to qualifications related to a given rank, such as that of junior assistant, for example. An exception must now be noted, for the committee on accountancy education of the Connecticut Society of Certified Public Accountants (*The Connecticut CPA*, January, 1944) has outlined the qualifications that a junior accountant should have in beginning his work for a professional firm.

"Soundness of mathematical thought in analysis and solution of problems
Accuracy in performing mathematical processes

Form and arrangement of mathematical solutions

Ability to perform ordinary mathematical processes without mechanical aids
The grammatical correct use of English
The ability, clearly, correctly and concisely, to express thoughts in writing and orally
The ability to read books and documents, with care and discrimination, to get the ideas contained therein
Good penmanship"

It is hoped that other society committees will formulate their bills of particulars also. They might with benefit set their hand as well to stating the general qualifications for advancement to the rank of semi-senior, and those for senior accountant.

Mathematics. The adjective "mathematical" has an important place in the qualifications listed by the Connecticut committee. A somewhat similar emphasis is made in an article elsewhere in this issue by Ben Bloom, entitled "Aptitude Tests for Accounting Students," in which the author speaks of understanding and manipulating numerical relationships, of prior performance in mathematics courses, and of testing for mathematical skills.

Other writers in the past have frequently mentioned "mathematical ability" as highly desirable in a public accountant. And the question immediately comes to mind: Does this mean "inherent ability for mathematical work" or "education" in that subject? Does it mean knowledge of the language and methods of higher mathematics (college algebra, analytical geometry, calculus, actuarial computations) or proficiency and skill in the usual processes of ordinary arithmetic?

Arithmetic might well be called a technique that is basic in accountancy, but skill therein does not necessarily mark a man as being promising staff material. Higher mathematics as such is seldom actually employed in day-to-day accounting work as it is in a great deal of engineering. It seems then that some skill in arithmetic would be more useful to an accountant

than knowledge of higher mathematics.

What many writers no doubt have in mind is not knowledge or skill, but rather some ability or talent or aptitude which they describe as "mathematical." The main usefulness of the study of higher mathematics for prospective accountants therefore would be in the development this might give to certain desired mental qualities. We shall put aside the possible collateral question of whether the study of mathematics can create desired mental ability, or merely develop the abilities that are present, if any. The main question is whether higher mathematics is a necessary part of the education of an accountant. If that kind of knowledge is necessary in his work, it should be in the education of the accountant as it is in that of the engineer and the scientist.

If the accountant needs a certain type of ability, but little or no mathematical knowledge, it is an open question whether the study of mathematics is the best way to attain that ability. If some other approach will develop the desired ability and at the same time give the student certain knowledge that will also be directly useful in his future work, it is clearly an advantage to follow this course, even if to do so means foregoing the discipline which is part of the study of mathematics.

It may well be that the idea which accountants and teachers really have in mind when they refer to "mathematical ability" is better described as *analytical ability*. In some fields, such as engineering and physics, analytical ability—since there it must deal extensively with observations, refined measurements, and predictions—must embrace the techniques of higher mathematics; in these fields, mathematics becomes in part the language in which thought is clothed. Analytical ability is very necessary in accountancy also. But it does not follow that it must rest on the same techniques as the sciences. It is

doubtful for example whether we could maintain that the language for expressing accounting thought is mathematical in the sense that the statement is true of the sciences.

If the qualities desired in an accountant were reduced to the bare minimum for professional survival, they probably would be: technical knowledge and analytical ability. And if the needed analytical ability can be developed at the same time that progress is being made in acquiring the necessary technical knowledge, the economy of the combination will be plainly evident.

This thought should not need much elaboration, since it is a matter of common knowledge that many public accountants of unquestioned analytical ability did not train on higher mathematics. It probably is significant also that statistics of student failures in accountancy often show close similarities to those of failures in college mathematics courses. Most teachers can recall several experiences tending to show that few students in engineering who were unsuccessful because of mathematics succeed in accountancy after changing colleges.

Probably very few teachers of mathematics would subscribe to the theory that prior training in accountancy would tend to make better mathematics students. Why should accounting teachers subscribe to the reverse? The fact is that the same quality of mind is indicated for both fields rather than that one is a feeder to the other. If the faculty for analysis, whatever that may consist of, is deficient, the person may reasonably be expected to experience difficulty in any field of study and activity in which that quality is important.

Analytical Ability. Adequate technical knowledge of accountancy must of course be suitably supplemented by a semitechnical knowledge of business law, corporation finance, and certain aspects of economics. In each of these subjects there are problem

areas of practice, where interest is centered upon customary methods and typical situations, and there are problem areas of theory, where the pros and cons of alternatives are debated.

But technical knowledge alone affords poor equipment for rendering professional service; among other needed factors is technical ability—something above and beyond knowledge as such. In accounting this may properly be called “analytical ability.” There are other factors which can contribute measurably to professional success; but it is not too much to say that these, unaided by a faculty for analysis, would not prove very adequate.

If analytical ability is of high importance to a public accountant, some explanation of the meaning of the phrase is in order. These notes are a hazard in that direction; they are also an open invitation to others to discuss the same topic.

Analytical ability is a complex concept which cannot be clearly described in a definition. A better approach is to examine some of its many constituent parts. From one point of view it consists of a faculty for arranging facts understandingly plus a faculty for understanding the facts as arranged.

A faculty for comprehending accounting facts (transaction data expressed in terms of money) is itself a complex of a number of abilities, some of which are:

to hold in mind a complex changing pattern to see scattered parts as integral parts of a whole to find threads of continuity in successive details

A faculty for associating accounting facts is likewise a complex of a number of abilities, some of which are:

to see relative proportions quickly among figures to sense the meaning of proportions among figures to relate figures to ideas, actions, policies, effects to judge which elements are the most significant

From one point of view, then, analytical ability includes two faculties—the ability to *comprehend* and the ability to *associate*,

and the two support one another. Part of the ability to comprehend (understand) comes from ability to associate (arrange), and vice versa. But that is not all. In order to do the comprehending and understanding that lies within accounting, in order to be able to grasp what is significant among many facts, it is necessary to have or to develop what might be called "figure-memory," except that this term might seem to emphasize the memorizing of digits, which would be absurd. Perhaps the concept necessary here is one that is better called "associative memory"—an ability to hold many facts and complex relations in mind at the same time that one is searching through them for the really significant. This is one approach at least to "grasping what is significant." Furthermore, in order to associate and arrange data, in order to see through and behind figures to ideas and possibilities, it is necessary to have or to develop what might be called "penetrative imagination," a phrase to suggest that accounting imagination need not be identified too closely with the creative imagination associated with an artist, a poet, or a composer.

Analytical Technique. While these ideas may help to construct a concept of analytical ability related to the work of an accountant, there should be added to the picture some notions of the accompanying techniques by means of which analytical ability becomes effective.

To use his analytical ability in accountancy a person needs to have some facility in manipulating figures and some facility in communicating ideas. The accountant must have the ability to use figures fluently as a medium of thought and this ability in turn rests upon skill in three simple techniques:

of easy and accurate performance of arithmetical processes
of legibility in writing and correctness in reading figures
of concise and interpretive tabulation of figures

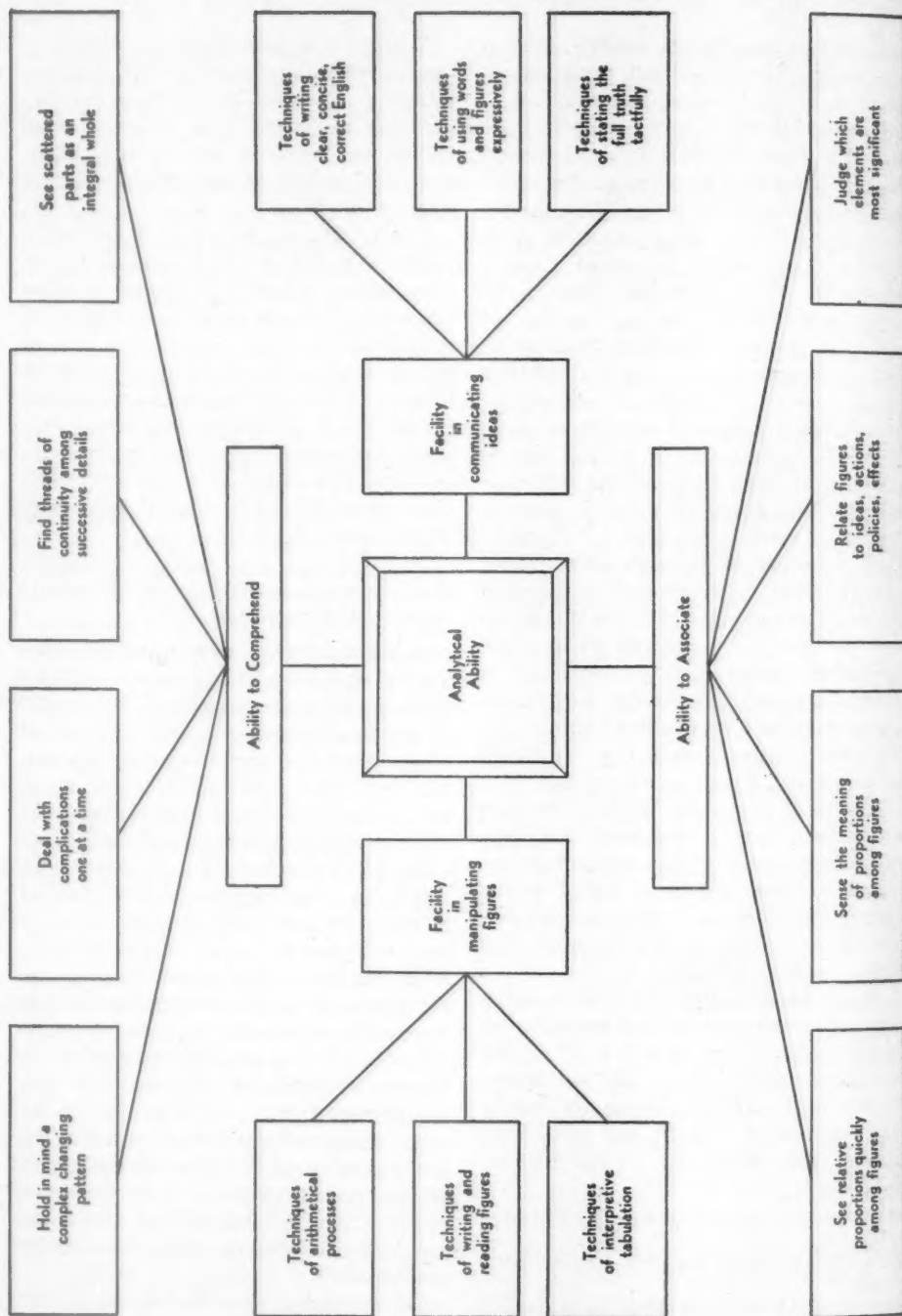
Without this basis, the manipulation of figures, which is so much a part of all accounting action, would be done only under considerable strain and without much confidence; without appropriate skills, analytical ability would function at best under a handicap.

If a facility in the use of figures is an underlying basis for analytical ability in accountancy, a facility for communicating accounting ideas is a necessary means for projecting the results of analysis beyond the accountant himself to other parties at interest. Unless the significance detected by analytical ability is clearly and convincingly revealed, the effort made is not justified. This ability to communicate, like the other ability here analyzed, rests upon certain simple techniques:

of combining words and figures expressively
of writing English concisely, clearly, and correctly
of stating the full truth tactfully

Analytical ability, when associated with a wide knowledge of accountancy, should produce technical competence. This is undoubtedly the primary basis of professional service; but the professional accountant, like any other professional man, needs more than technical competence. The other qualities needed are not under consideration here; but as a reminder that they exist, these may be named: physical capacity for concentrated work; capacity for continuing to grow with experience; a personality for friendliness and leadership; pride in professional craftsmanship; resourceful adaptability; and common sense—a term so admirably explained in Webster's *Dictionary of Synonyms* that this is quoted: "... a native capacity for seeing things as they are and without illusion or emotional bias, for making practical choices or decisions that are sane, prudent, fair, reasonable, and that commend themselves to the normal, or average good mind."

For a compact presentation, see p. 198.



PROFESSIONAL EXAMINATIONS

A Department for Students of Accounting

HENRY T. CHAMBERLAIN

THE FOLLOWING problems were presented by the Board of Examiners of the American Institute of Accountants as the second half of the November, 1943 examination in accounting practice. The weights assigned were: problem 1, 14 points; problem 2, 20 points; problem 3, 16 points. The time allowed to solve all problems was four and a half hours. A suggested time schedule follows:

Problem 1	75 minutes
Problem 2	100 minutes
Problem 3	90 minutes

No. 1

From the following data prepare a columnar work schedule, showing the financial transactions of the City of M in 1942 together with general-fund and bond-fund balance-sheets and statement of bonded debt at the close of that year:

1. Balance-sheet—January 1, 1942:

<i>Assets</i>	
Cash.....	\$ 2,000
Taxes receivable—arrears.....	15,000
	<u>\$ 17,000</u>
<i>Liabilities</i>	
Reserve for uncollectible taxes—arrears	\$ 10,000
Accounts payable.....	3,000
Unappropriated surplus.....	4,000
	<u>\$ 17,000</u>

STATEMENT OF BONDED DEBT—JANUARY 1, 1942

<i>Assets</i>	
Deferred charges to future taxation....	<u>\$285,000</u>
<i>Liabilities</i>	
4½% serial bonds payable.....	<u>\$285,000</u>

2. Budget for the year 1942:

<i>Estimated revenues</i>	
Taxes receivable—1942 levy.....	\$225,000
Court fines.....	10,000
Licenses.....	6,000
Permits.....	10,000
Interest and penalties.....	8,000
	<u>\$259,000</u>

<i>Current appropriations</i>	
General government.....	\$ 68,000
Police department.....	61,000
Fire department.....	12,000
Highway department.....	44,000
Sanitation department.....	39,000
Retirement of serial bonds.....	15,000
Interest on bonds.....	17,000
Interest on tax notes.....	3,000
	<u>\$259,000</u>

3. The amount of taxes levied for the year 1942 is \$236,250, which includes a 5% allowance for uncollectible accounts.

4. Receipts and disbursements in 1942:

<i>Receipts</i>	
Current taxes.....	\$223,000
Taxes in arrears.....	6,000
Tax anticipation notes.....	90,000
<i>Other revenues</i>	
Court fines.....	\$10,600
Licenses.....	6,100
Permits.....	9,800
Interest and penalties....	8,400
	<u>34,900</u>
	<u>\$353,900</u>

<i>Disbursements</i>	
<i>Sundry appropriations</i>	
General government....	\$67,000
Police department.....	59,250
Fire department.....	10,750
Highway department....	42,000
Sanitation department...	40,000
Retirement of serial bonds	15,000
Interest on bonds.....	17,000
Interest on tax notes....	2,700
	<u>\$253,700</u>
Tax anticipation notes.....	90,000
Accounts payable.....	3,000
	<u>\$346,700</u>

5. Bills unpaid at December 31, 1942, amounted to \$2,600.
6. The uncollected taxes originating prior to January 1, 1942, should be fully reserved for.
7. Other transactions in 1942:
- The construction of a new municipal center was authorized at an estimated cost of \$100,000.
 - 4½% serial bonds in the principal amount of \$100,000 were authorized and issued at par.

- (c) Contracts were let for construction of the municipal center, aggregating \$95,000.
- (d) \$60,000 was paid on these contracts.
- (e) On December 31, 1942, \$80,000 construction work was completed.

No. 2

From the following information prepare:

- (a) A columnar work schedule showing the June 30, 1943, balance-sheet before and after the proposed reorganization, with explanatory adjustment columns for the necessary changes in the several balance-sheet items.
- (b) A statement showing the effect of the proposed reorganization upon annual bond-interest and amortization charges and dividend requirements.

The following balance-sheet of June 30, 1943, was prepared from National Industries, Inc.'s books:

<i>Assets</i>	
Cash.....	\$ 1,130,000
Other current assets.....	1,450,000
Property, less depreciation.....	6,800,000
Sinking fund cash.....	500,000
Unamortized discount, Series A bonds.....	30,000
Unamortized discount, Series B bonds.....	90,000
	<hr/>
	\$10,000,000
<i>Liabilities</i>	
Preferred dividends payable July 1, 1943.....	\$ 39,375
Bond interest accrued (July 1, 1943, coupon).....	97,500
Other current liabilities.....	63,125
Series A 6% bonds due July 1, 1948.....	2,000,000
Series B 5% bonds due July 1, 1953.....	1,500,000
\$5 cumulative preferred no-par stock A 7,500 shares, stated value.....	675,000
\$6 cumulative preferred no-par stock B 20,000 shares, stated value.....	1,700,000
Common stock, no par value 50,000 shares, stated value.....	625,000
Appraisal surplus.....	1,750,000
Earned surplus.....	1,550,000
	<hr/>
	\$10,000,000

The company, to reduce its fixed charges and dividend requirements, has planned a reorganization, approved by shareholders,

bondholders, and other interested parties, on the following basis:

1. \$3,000,000 consolidated first mortgage 4% bonds dated June 1, 1943, and payable June 1, 1993, to be sold July 1, 1943, at 105 and accrued interest.
2. Outstanding mortgage bonds Series A and B to be redeemed on July 1, 1943, at par plus interest to July 31, 1943.
3. The holders of Series A bonds to receive a call premium of \$15 per \$1,000 bond.
4. Preferred stock A to be changed from \$5 no-par to 5% \$100 par value.
5. Preferred stock A to be increased from 7,500 to 10,000 shares and the present holders to receive a dividend of $\frac{1}{3}$ share of this stock for every share owned.
6. Present holders of preferred stock A also to receive an extra cash dividend of \$1.25 per share.

7. 205,000 shares new common stock of \$10 each to be issued and exchanged as follows:

10 shares new common for each share of preferred stock B.

1 share new common for every 10 shares of old no-par common.

8. Commissions and expenses in connection with the issue and sale of new bonds will be \$45,000.
9. All transactions under the reorganization plan, as well as dividends payable, are to be considered as settled in cash.

No. 3

From the following—(a) compute the book value of Q's preferred and common shares on the date of his death and determine the amount of the company's non-interest-bearing note to be issued to the deceased's estate; also (b) prepare a comprehensive columnar work-sheet showing adjustments to the bookkeeper's statements.

No consideration need be given to possible adjustment of accrual for 1943 federal income taxes.

Q and R, the two shareholders of the QR Company, made an agreement in 1938 which contains the following clause:

"In the event of withdrawal from the company or death of either party, the remaining party shall cause the corporation to issue, in exchange for all the preferred and common stock then held in the name of the withdrawn or deceased party, a non-interest-bearing note (payable to the

withdrawn party or the deceased's estate in equal cash instalments over a period of ten years) in an amount equal to book value, which shall be determined by a certified public accountant of recognized standing in accordance with prevailing accounting principles, plant and equipment now carried on the basis of December 31, 1928, appraisal, to be included on the basis of depreciated cost."

Q died on March 31, 1943, on which date he owned 2,100 shares preferred and 600 shares common stock of the company. In order to determine the amount of the above note, the books were closed as of the date of death.

The following condensed balance-sheet of December 31, 1942, had been prepared by the bookkeeper:

Net assets.....	<u>\$1,482,740</u>
Capital	
\$5 cumulative preferred stock, no-par value—3,500 shares.....	\$ 322,000
Common stock, no par value—1,000 shares.....	75,000
Surplus	
Balance at December 31, 1942.....	1,085,740
	<u>\$1,482,740</u>

The bookkeeper also prepared a statement of profit and loss showing that \$26,250 had been earned in the three months ended March 31, 1943.

Upon examination of the accounts it was found that the surplus of December 31, 1942, was made up as follows:

1. Appreciation reserve.....	\$ 55,800
Original amount Dec. 31, 1928.....	\$186,000
Less 5% per annum to Dec. 31, 1942.....	130,200
	<u>\$ 55,800</u>
2. Reserve for renegotiation of war contracts.....	250,000
Final settlement on all contracts was made with the War Department in February, 1943, whereby for each of the 16 months commencing March 1, 1943, a deduction of \$8,500 was to be made from amounts otherwise due from the War Department.	
3. Reserve for war-plant amortization.....	85,440
Provision for the year 1942, permitted as a deduction from taxable income.	
4. Reserve for loss on inventory realization.....	105,000
Unchanged since 1938. Inventories now valued at lower of cost or market.	
5. Reserve for 1942 income taxes.....	100,000
Of this amount \$25,100 was needed to increase the accrual shown among current liabilities to the correct amount of the tax due on 1942 net income.	

6. Sinking fund reserve.....	\$ 179,350
Eight annual provisions of \$20,000, plus interest on sinking-fund investments. The sinking fund relates to a 20-year \$400,000 bond issue.	
7. Earned surplus.....	340,900
Together.....	<u>\$1,116,490</u>
Less—	
8. Treasury stock.....	30,750
300 shares preferred stock, purchased on June 30, 1942, from R at \$100 per share plus dividend accrued since December 31, 1941.	
Balance at December 31, 1942.....	<u>\$1,085,740</u>

It was also found that—

9. Interest of \$1,525 on sinking-fund investments had been credited to the sinking-fund reserve on March 31, 1943.
10. Preferred dividends had accrued since December 31, 1941.
11. The \$26,250 profit item represents the surplus profit of the three months ended March 31, 1943, after deducting:
 - (a) \$ 2,325 for depreciation of appreciation.
 - (b) \$ 8,500 paid on account of renegotiation settlement.
 - (c) \$21,360 for amortization of war plant.
 - (d) \$62,110 for accrued federal income taxes.

Solution to Problem 1

CITY OF M Working Papers January 1, 1942 to December 31, 1942					
Balance Sheet January 1, 1942		Transactions—1942		Balance Sheet December 31, 1942	
		Dr.	Cr.		
Cash.....	\$ 2,000.00	(D) \$ 353,900.00	(E) \$ 346,700.00	\$ 9,200.00	
Taxes receivable—arrears.....	15,000.00		(D) 6,000.00	9,000.00	
Taxes Receivable—1942.....		(C) 236,250.00	(D) 223,000.00	13,250.00	
Tax anticipation notes.....		(E) 90,000.00	(D) 90,000.00		
Reserve for uncollectible taxes—					
arrears.....	\$ 10,000.00	(G) 1,000.00		\$ 9,000.00	
Accounts payable.....	3,000.00	(E) 3,000.00	(F) 2,600.00	2,600.00	
Unappropriated surplus.....	4,000.00		(G) 1,000.00		
Excess of appropriations over			(P) 3,700.00		
expenditures.....			(P) 900.00		
Excess of revenues over estimated					
revenues.....		(R) 1,000.00		8,600.00	
Over-expended appropriation..					
	<u>\$ 17,000.00</u>				<u>\$ 17,000.00</u>
Estimated revenues:					
Taxes receivable—1942 levy.....		(A) 225,000.00	(C) 225,000.00		
Court fines.....		(P) 600.00			
Licenses.....		(A) 10,000.00	(D) 10,600.00		
Permits.....		(P) 100.00			
Interest and penalties.....		(A) 6,000.00	(D) 6,100.00		
Estimated budget surplus.....		(P) 400.00	(D) 200.00		
Appropriations		(A) 8,000.00	(D) 9,800.00		
General government.....		(B) 259,000.00	(A) 259,000.00		
Police department.....		(P) 1,000.00			
Fire department.....		(E) 67,000.00	(B) 68,000.00		
Highway department.....		(P) 1,750.00			
Sanitation department.....		(E) 59,250.00	(B) 61,000.00		
Retirement of serial bonds.....		(P) 1,250.00			
Interest on bonds.....		(E) 10,750.00	(B) 12,000.00		
Interest on tax notes.....		(P) 2,000.00			
Unallocated appropriation expenditures.....		(E) 42,000.00	(B) 44,000.00		
Reserve for uncollectible 1942 taxes.....		(E) 40,000.00	(R) 1,000.00		
		(E) 15,000.00	(B) 39,000.00		
		(E) 17,000.00	(B) 15,000.00		
		(P) 300.00	(B) 17,000.00		
		(E) 2,700.00	(B) 3,000.00		
		(F) 2,600.00	(P) 2,600.00		
			(C) 11,250.00	11,250.00	
		<u>\$1,466,850.00</u>	<u>\$1,466,850.00</u>	<u>\$ 31,450.00</u>	<u>\$ 31,450.00</u>
Deferred charges to future taxation \$285,000.00		Capital fund			
New construction authorized.....		(O) \$ 80,000.00	(M) \$ 15,000.00	\$350,000.00	
4½% serial bonds payable.....	\$285,000.00	(N) 100,000.00	(O) 80,000.00	20,000.00	
	<u>\$285,000.00</u>	(M) 15,000.00	(N) 100,000.00	\$370,000.00	
		<u>\$ 195,000.00</u>	<u>\$ 195,000.00</u>	<u>\$370,000.00</u>	<u>\$370,000.00</u>

Professional Examinations

203

				Bond fund			
Bonds authorized.....	(H) \$ 100,000.00	(I) \$ 100,000.00					
Cash.....	(I) 100,000.00	(K) 60,000.00	\$ 40,000.00			\$ 20,000.00	
Contracts payable.....		(L) 20,000.00					
Reserve for encumbrances.....	(L) 20,000.00	(J) 95,000.00					
Reserve for encumbrances.....	(K) 60,000.00	(H) 100,000.00					
Bond fund balance.....	(J) 95,000.00						
	\$ 375,000.00	\$ 375,000.00	\$ 40,000.00	\$ 40,000.00			

KEY TO TRANSACTIONS

- (A) To record estimated revenues.
 (B) To record appropriations.
 (C) To set up taxes receivable and the reserve for uncollectible taxes.
 (D) The credit to estimated revenue is \$336,250.00 + 1.05.
 (E) To record cash receipts.
 (F) To record cash disbursements.
 (G) To record liability for bills unpaid at December 31, 1942. The particular appropriation for which this liability was incurred is not given and the amount is, therefore, charged to "unallocated appropriation expenditures."
 (H) To transfer excess provision for taxes in arrears to unappropriated surplus.
 (I) To set up authorized bonds.
 (J) To record sale of bonds.
 (K) To record contract for new construction.
 (L) To record payment on contract.
 (M) To set up liability for completed work which remains unpaid.
 (N) To reduce bond liability for current retirement.
 (O) To set up liability for new bonds issued.
 (P) To transfer completed work to deferred charges to future taxation.
 (Q) & (R) To close estimated revenues and appropriation to unappropriated surplus.

Solution to Problem 2

NATIONAL INDUSTRIES, INC. Working Papers—Proposed Reorganization Transactions June 30, 1943

Assets	Balance Sheet June 30, 1943	Proposed Transactions		Balance Sheet After Proposed Transactions
		Dr.	Cr.	
Cash.....	\$ 1,130,000.00	(A) \$ 3,160,000.00	(B) \$ 3,643,750.00	\$ 552,500.00
			(C) 9,375.00	
			(H) 39,375.00	
			(G) 45,000.00	
Other current assets.....	1,450,000.00			1,450,000.00
Property, less depreciation.....	6,800,000.00			6,800,000.00
Sinking fund cash.....	500,000.00			500,000.00
Unamortized discount, Series A bonds.....	30,000.00		(B) 30,000.00	
Unamortized discount, Series B bonds.....	90,000.00		(B) 90,000.00	
	<u>\$10,000,000.00</u>			<u>\$9,302,500.00</u>
Liabilities				
Preferred dividends payable July 1, 1943.....	\$ 39,375.00	(H) 39,375.00		
Bond interest accrued (July 1, 1943, coupon).....	97,500.00	(B) 97,500.00		
Other current liabilities.....	63,125.00			\$ 63,125.00
Series A 6% bonds due July 1, 1948.....	2,000,000.00	(B) 2,000,000.00		
Series B 5% bonds due July 1, 1953.....	1,500,000.00	(B) 1,500,000.00		
\$5 cumulative preferred no-par stock A 7,500 shares, stated value.....	675,000.00	(E) 1,000,000.00	(D) 325,000.00	
\$6 cumulative preferred no-par stock B 20,000 shares, stated value.....	1,700,000.00	(F) 1,700,000.00		
Common stock, no-par value 50,000 shares, stated value.....	625,000.00	(F) 625,000.00		
Appraisal surplus.....	1,750,000.00			1,750,000.00
Earned surplus.....	1,550,000.00	(B) 166,250.00		1,049,375.00
		(C) 9,375.00		
		(D) 325,000.00		
	<u>\$10,000,000.00</u>			
4% consolidated first mortgage bonds, due June 1, 1993.....		(A) 3,000,000.00		3,000,000.00
Premium on 4% consolidated first mortgage bonds.....		(G) 45,000.00	(A) 150,000.00	105,000.00
Accrued interest on consolidated mortgage bonds.....			(A) 10,000.00	10,000.00
5% \$100.00 par value preferred stock (10,000 shares).....			(E) 1,000,000.00	1,000,000.00
Common stock, \$10.00 par (or stated value) (205,000 shares).....			(F) 2,050,000.00	2,050,000.00
Paid-in surplus.....			(F) 275,000.00	275,000.00
		<u>\$10,667,500.00</u>	<u>\$10,667,500.00</u>	<u>\$9,302,500.00</u>

KEY TO REORGANIZATION TRANSACTIONS

- (A) To record issuance of \$3,000,000.00 consolidated first mortgage bonds at 105 plus accrued interest. The bonds are dated June 1, 1943.
 (B) To record redemption of Series A and Series B bonds. The charge to earned surplus is made up of the following items:
 Interest for one month on Series A bonds..... \$ 10,000.00
 Redemption premium on Series A bonds..... 6,250.00
 Unamortized discount, Series A bonds..... 30,000.00
 Unamortized discount, Series B bonds..... 30,000.00
 Unamortized discount, Series B bonds..... 90,000.00
\$166,250.00

- (C) To record extra cash dividend on 7,500 shares of preferred stock A.
 (D) To record stock dividend of 2,500 shares of preferred stock A.
 (E) The charge to earned surplus of \$325,000.00 is made to bring the capital stock account up to \$1,000,000.00.
 (F) To reclassify preferred stock A.
 (G) To record the issuance of new common stock.
 (H) To record commissions and expenses in connection with sale of new bonds. The charge is made against the premium account, the balance representing the net premium received.

(b)

NATIONAL INDUSTRIES, INC.

*Statement Showing Effect of Proposed Reorganization on Annual Bond Interest,
 Amortization Charges and Dividend Requirements*
Bond Interest and Amortization Charges

Existing debt:

Series A—bond interest.....	\$120,000.00	
Series A—discount amortization.....	6,000.00	
Series B—bond interest.....	75,000.00	
Series B—discount amortization.....	9,000.00	\$210,000.00

Proposed debt:

Consolidated 4%—bond interest.....	\$120,000.00	
Less amortization of premium.....	2,100.00	117,900.00

<i>Decrease in interest and amortization charges.....</i>		<u>\$ 92,100.00</u>
---	--	---------------------

*Preferred Dividends**Preferred stock presently outstanding*

\$5 cumulative preferred no-par value stock A		
7,500 shares—dividend.....	\$ 37,500.00	
\$6 cumulative preferred no-par value stock B		
20,000 shares—dividend.....	120,000.00	\$157,500.00

Proposed new preferred stock

5% \$100.00 par value preferred stock		
10,000 shares—dividend.....		50,000.00

<i>Decrease in preferred dividend requirements.....</i>		<u>\$107,500.00</u>
---	--	---------------------

<i>Total decrease in interest, amortization and dividend requirements.....</i>		<u>\$199,600.00</u>
--	--	---------------------

NOTE: In this solution the unamortized bond discount and redemption premium are charged off immediately. If these items were to remain in the accounts to be charged off over the life of the original bonds there would be an additional charge, through June 30, 1948, of \$23,625.00. The computation is as follows:

SERIES A

<i>Redemption premium:</i>		
Call premium of \$15 per \$1,000 bond.....	\$ 30,000.00	
Interest for one month following redemption.....	10,000.00	
Unamortized discount.....	30,000.00	
<i>Total.....</i>	<u>\$ 70,000.00</u>	
<i>Annual charge—$\frac{1}{4}$ of \$70,000.00.....</i>		<u>\$ 14,000.00</u>

SERIES B

<i>Redemption premium:</i>		
Interest for one month following redemption.....	\$ 6,250.00	
Unamortized discount.....	90,000.00	
<i>Total.....</i>	<u>\$ 96,250.00</u>	
<i>Annual charge—$\frac{1}{4}$ of \$96,250.00.....</i>		<u>9,625.00</u>
		<u>\$ 23,625.00</u>

Solution to Problem 3

(a) COMPUTATION OF BOOK VALUES			
Surplus, December 31, 1942 (per bookkeeper).....			\$1,085,740.00
Less: Appreciation reserve.....	\$ 55,800.00		
Liability on renegotiation settlement.....	136,000.00		
Reserve for war-plant amortization.....	85,440.00		
Addition to 1942 income tax liability.....	25,100.00		302,340.00
			<u>\$ 783,400.00</u>
Add paid-in value of treasury shares (\$92.00 per share).....			27,600.00
			<u>\$ 811,000.00</u>
Adjusted surplus, December 31, 1942.....			<u>\$ 811,000.00</u>
Net income for three months ended March 31, 1943 (per bookkeeper).....			\$ 26,250.00
Add: Interest on sinking fund investments.....	\$ 1,525.00		
Depreciation on appreciation.....	2,325.00		
Payment on renegotiation settlement.....	8,500.00		12,350.00
			<u>\$ 38,600.00</u>
Adjusted net income.....			<u>\$ 38,600.00</u>
Adjusted surplus, December 31, 1942.....			\$ 811,000.00
Adjusted net income.....			38,600.00
			<u>\$ 849,600.00</u>
Adjusted surplus, March 31, 1943.....			<u>\$ 849,600.00</u>
	<i>Preferred</i>	<i>Common</i>	<i>Total</i>
Paid-in value.....	\$322,000.00	\$ 75,000.00	\$ 397,000.00
Less paid-in value of treasury shares.....	27,600.00		27,600.00
	<u>\$294,400.00</u>	<u>\$ 75,000.00</u>	<u>\$ 369,400.00</u>
Accrued preferred dividend on 3,200 shares at \$6.25 per share....	20,000.00		20,000.00
Surplus applicable to common stock (\$849,600.00 less \$20,000.00).		829,600.00	829,600.00
	<u>\$314,400.00</u>	<u>\$904,600.00</u>	<u>\$1,219,000.00</u>
Book values.....			
Outstanding shares.....	3,200	1,000	
Book values per share.....	\$98.25	\$904.60	
Amount of non-interest bearing note:			
2,100 shares of preferred stock at \$98.25 per share.....			\$ 206,325.00
600 shares of common stock at \$904.60 per share.....			542,760.00
			<u>\$ 749,085.00</u>

Q R COMPANY
Work Sheet—Adjusting Accounts
March 31, 1943

(b)

	Balance Sheet December 31, 1942 (per bookkeeper)	Dr.	Adjustments	Cr.	Adjusted Balance Sheet December 31, 1942	Net Income for 3 months (per bookkeeper)	Dr.	Adjustments	Cr.	Adjusted Balance Sheet March 31, 1943
Net assets at December 31, 1942.....	\$1,482,740.00				\$1,180,400.00	\$109,720.00				\$1,180,400.00
Increase in net assets to March 31, 1943.....						1,525.00			(L) \$25,100.00	38,600.00
Reserve for revaluation of plant and equip.....			(A) \$ 55,800.00					(I) \$ 2,325.00		
Due U. S. Government on renegotiation settlement			(B) 185,000.00					(L) 8,500.00		
Reserve for war-plant amortization.....			(C) 85,440.00			\$21,360.00				
Accrued income taxes.....			(E) 25,100.00			\$62,110.00		(L) 25,100.00		
			(G) 549,150.00			\$ 27,775.00				
Net assets, March 31, 1943.....										\$1,219,000.00
5% cumulative preferred stock, no-par value....	\$ 322,000.00				\$ 322,000.00					\$ 322,000.00
Common stock, no-par value.....	75,000.00				75,000.00					75,000.00
Surplus, December 31, 1942.....	1,085,740.00									
		(A) \$ 55,800.00	(H) 30,750.00							
		(B) 136,000.00								
		(C) 85,440.00								
		(D) 105,000.00								
		(E) 25,100.00								
		(F) 160,000.00								
		(G) 549,150.00								
Earned surplus:										
Unappropriated balance, Dec. 31, 1942.....			(G) 549,150.00							549,150.00
Reserve for loss on inventory realization.....			(D) 105,000.00							105,000.00
Sinking fund reserve.....			(F) 160,000.00							160,000.00
					\$1,211,150.00					\$1,211,150.00
		(H) 30,750.00			30,750.00					30,750.00
Net Income.....					\$1,180,400.00					\$1,180,400.00
						26,250.00			(I) 1,525.00	38,600.00
									(J) 2,325.00	
									(K) 8,500.00	
										\$1,219,000.00

* Red

KEY TO ADJUSTMENTS

- (A) To set up reserve for revaluation of plant and equipment.
 (B) To set up liability on renegotiation settlement.
 (C) To remove reserve for war-plant amortization from surplus. The item is a valuation reserve.
 (D) To show reserve for loss on inventory as segregated earned surplus.
 (E) To increase liability for income taxes.
 (F) To set up sinking fund reserve as segregated earned surplus. The amount is adjusted to \$160,000.00 since this would appear to answer the purpose of the reserve.
 (G) To segregate balance of unappropriated earned surplus.
 (H) To show treasury stock at cost as a deduction from the sum of paid-in capital and earned surplus.
 (I) To adjust interest on sinking fund investments incorrectly credited to sinking fund reserve.
 (J) To adjust net income for depreciation on appreciation.
 (K) To adjust net income for payment made on renegotiation settlement.
 (L) To record payment of 1942 taxes.

BOOK REVIEWS

SIDNEY G. WINTER

Depreciation of Group Properties. Robley Winfrey. (Ames: Iowa State College Bulletin, 1942. Pp. 131.)

Mr. Winfrey's work may be fairly described as a revised edition of Prof. Edwin B. Kurtz's book: *The Science of Valuation and Depreciation*. (New York: The Ronald Press Co., 1937.) At the Iowa Engineering Experiment Station, both authors have collaborated extensively in the compilation of observational data concerning the life expectancy of homogeneous groups of physical property, classifying the latter according to their survival characteristics.

The raw material for both books is thus identical. The same may be said for the general mental attitude adopted toward the problem of depreciation, as well as for its presentation and treatment. On the principal conclusion, full agreement is also in evidence, in the sense that each author "proves," and by the same means too, that he alone is right. That creates an interesting situation, because it so happens that Kurtz's "only scientific approach" differs materially from Winfrey's "only mathematically correct method."

Both methods have long been known and are hereinafter referred to as the Kurtz and Winfrey methods merely for convenience of language. This reviewer has compared them mathematically and graphically in "The Practice of Depreciation," *Econometrica*, July 1939. To state the difference in the simplest terms, let us suppose that 100 similar machines are acquired for \$10,000. In the light of past experience it seems certain that such machines have an average life of 10 years, even though each one will actually be retired at a different date between zero and 20 years.

Now, what did we actually buy, 100 machines at \$100 each, as stated in the bill of sale, or 1,000 life units of service at \$10 each? Winfrey endorses the former and Kurtz the latter interpretation, except that Kurtz, though admitting the existence of only 1,000 life units, thinks it more scientific to pretend that there are 1,050. This pointless distortion may be disregarded for present purposes.

Whether we charge off \$100 per machine or \$10 per life unit of service, the \$10,000 will be recovered at the end of 20 years. In the meantime, however, the periodic credits to the reserve are not the same. For instance, with respect to an unidentifiable single machine which will drop out at the end of 5 years, Winfrey would credit \$20 and Kurtz only \$10 per annum to the reserve. Conversely, in the case of another machine which remains in service for 20 years, Winfrey's credit to the reserve would be \$5 per year and Kurtz's still \$10. Similar computations made for all surviving machines should be summed up to get the total annual additions to the reserves. It will then be found that Winfrey's reserve always exceeds Kurtz's, except at the two end-points.

Winfrey's concept of the "condition percent" of this property group is the sum of all individual ratios of un-

expired life to total life, divided by the original number of machines and expressed per centum. Thus, at the end of the third year, the five-year machine is said to be in a 40% and the twenty-year machine in an 85% "condition," their combined contribution toward the condition of the group being counted as 1.25%. Kurtz's "remainder service life" concept is identical, but becomes irrelevant when he fails to make use of it in the end.

The computation of the "condition per cent," which Winfrey specifically defines as "100 times the ratio of present depreciable value to depreciable value, when new" (p. 12), is clearly inconsistent with the statement that "the analysis is based solely upon the service given up by the property" (p. 50), because his basic assumption is that each machine renders an equal measure of service per unit of time. His "condition per cent" is determined, not by the service, but by the allocated cost "given up" by each machine, under a literal interpretation of the bill of sale, the terms of which, viz. 100 @ \$100 = \$10,000, are meaningless by the testimony of his own survival curves. If he wanted to know how much service still remains in the property group, he would have to count the remaining life units and divide them by the original number. Returning to the previous random illustrations, the five-year machine has 2 and the twenty-year machine 17 such units left. Accordingly, they contribute not 1.25%, but 1.9% to the total remaining service.

Kurtz eventually shifts to the latter type of calculation, whereas the failure to distinguish between equal units of service and the unequal costs allocated to them pervades Winfrey's whole work. Another good instance is the following passage: "Wholly independent of any method of estimating depreciation is the fact that the service remaining in the group of units comprising a stable property is exactly 50% of the service available in the same units when new" (p. 81, italics his). An accurate statement would be: Wholly independent of the shape of the survival curve and the average life is the fact that the cost allocated by this particular method of depreciation to the services remaining in a group of units comprising a stable property is exactly 50% of the cost of the services available in the same units, when new.

It follows from the general shape of all observed survival curves that a stable or mature plant, i.e., one that has been continuously maintained at 100 machines, must contain more than one-half of the life units of service inherent in a plant composed of the same number of new machines. The theoretical extremes are 2/3 when the survival curve is a diagonal straight line (as in Fig. 3, p. 39), and 1/2 when it is a vertical line coinciding with the average life. In the latter event the level does not really exist but remains a mere average, since no damping takes place.

How a mature plant which retains more than 50% of its service-capacity can be said to be in a 50% condi-

tion is not apparent, until one realizes that Winfrey's concept of "condition" flouts his avowed aim expressed thus: "Obviously, any acceptable method must distribute the depreciation over the full life of the property and result in depreciated values at all ages which are in harmony with the service remaining in the survivors" (p. 75, italics his). It is the Kurtz method which, upon being purged of its minor blemishes, will achieve such harmony. When the rate of interest is zero and there is no scrap value, Kurtz's ratio of unexpired cost to original cost is the same as the ratio of remaining service-capacity to original capacity. The Bell Telephone System has been using this method for more than two decades.

It is now in order to turn to the much emphasized "proof of the correctness of the present-worth principle" (p. 50) which convinces Winfrey that he can not be wrong. It consists simply of a demonstration that—in the absence of scrap value, interest and growth—his choice of a depreciation method leads ultimately to a reserve balance of 50% for any type of survival curve and any average life. The mathematics department, called in for the purpose, rises to the occasion in nine pages of calculus which boil down to a formula given by this reviewer four years ago, viz.:

$$\frac{1}{\sigma} \int_0^{\sigma} \int_0^n (1-t/\tau) f(\tau) d\tau dt = \frac{1}{2}$$

wherein σ = average life, n = maximal life, t = age, τ = life and $f(\tau)$ = a normalized frequency distribution of any shape or form whatsoever. (N.B. The term "normalized" signifies merely that the area below the curve shall be unity.)

The obvious is thus explained in terms of the abstruse, in the best tradition of mathematicians. What it all means is that, if a rectangle be divided into two triangles by a diagonal line $1-t/\tau$ connecting opposite corners, then the area of each triangle is just half that of the rectangle. More completely, that the same theorem remains true for the sum of an infinite number of rectangles of equal infinitesimal heights and random bases. Upon deleting t/τ from the formula, the rectangles will be summed up and the answer is unity.

From this result, only two legitimate conclusions can be drawn. The first is that the Winfrey method amounts to splitting rectangles of equal height diagonally. That fact leaps to the eye in the reviewer's graph mentioned above. Second, it also follows that the arithmetic of Winfrey's corresponding tables is in order. In short, we know now that he did correctly what he thought he had to do. But how do the integrals prove that it was a good idea to do it? How do they justify the following final claims repeated incessantly?

"The unit-summation procedure of the present-worth method is shown to be the only mathematically correct method. It is not admitted that more than one correct method exists for applying an age-life ratio to property groups, when estimating depreciation" (p. 6, italics his).

"It is proved that group properties in normalized condition have a ratio of remaining units of service to available units of service when new of 0.50, regardless of the average life of the group and of the characteristics of the retirement curve. Consequently, the condition

percent of the depreciable value of the group at a zero interest rate is 50 percent" (p. 6, italics the reviewer's).

To hold that proper performance of a routine task proves the worth of the underlying idea is indefensible. In addition, the result does not even conform to the original idea of "harmony" and thus stands convicted by Winfrey's own definition of an "acceptable method" (p. 75, quoted in full above). This obviates any present need to ask whether there is such a thing as an "only correct method."

An interesting *curiosum* is that Kurtz was similarly fascinated by the magic of 50% which, in his modest opinion, constitutes "convincing evidence of the soundness of the method . . . the logic . . . the accuracy . . . a verification of the entire preceding analysis and a demonstration of the inherent unity of the body of principles presented" (*loc. cit.* pp. 5-6). That places him in an even less enviable position, for his method can not lead to a fixed 50% level, as already stated. His faith that it must was so great, however, that it led him into just the right mathematical error at the right time (see "The Practice of Depreciation," cited above). The practical merit of the method which achieves the "harmony" sought by Winfrey is in no way impaired by its failure to behave as expected.

When the rate of interest is introduced, Winfrey admits that the correct maturity level of his method rises above 50%. The reason is that he no longer splits his rectangles by straight lines, but by annuity curves which increase the area of the triangles he must sum up. Kurtz's level will of course also rise from wherever between 2/3 and $\frac{1}{2}$ it would otherwise be.

In the case of growth or expansion, Winfrey also recognizes a rise in the maturity level, but states that "additional studies are needed to show the limits of the range of such influence for various retirement distributions, average lives and rates of growth of property units in service" (p. 66). This is an instance where calculus could save him a lot of trouble. The correct level of his method for any constant rate of expansion is simply

$$\frac{\sigma}{\int_0^{\sigma} M(t) e^{-xt} dt}$$

by the formula given above, when the average life σ , which also expresses the entire area of the survival curve $M(t)$, is replaced by the same area discounted at the expansion rate x . Since $\frac{1}{2}$ is thus multiplied by a greater number than it is divided by, the level rises again. It is no longer independent of the shape of the survival curve, however, because the discounting process affects different shapes to different extents. Translated into the obvious, the formula means that an expanding plant contains a greater proportion of relatively new machines, in which more service and therefore also more allocated cost must remain.

Winfrey's graphs showing the oscillations of the "condition percent" of continuously renewed property depreciated by his particular method look all right to the naked eye and, if he computed them by arithmetic are probably accurate enough. They could not possibly be, had he emulated Kurtz in acting on their joint be-

lie that "the dampened sine wave /is/ characteristic of the theoretical behavior of the renewals in continuous property composed of similar individual units" (p. 46). There is a superficial resemblance, but that is all. Renewal theory is far too complex to be touched upon here, but its literature is readily available.

Speaking of literature, perusal of the *Bulletin* gives a strong impression that Winfrey is aware only of those contributions to his chosen subject which the former or present faculty and students of Iowa State College happened to make. Neither in the footnotes nor in the text can any outsider's name or idea be spotted. Such isolationism is bound to cause much waste of effort, especially when conclusions have to be reached by arithmetic. The information he seeks so diligently and laboriously has been waiting for him in libraries for years. A good example is the second formula above. The additional studies he is planning on the subject of growth may take a year or more, but he can check the formula in a couple of days. It answers all questions now raised by him in this connection.

In conclusion, one statement may be quoted, with which no disagreement is possible. "Depreciation should not be destined to be a subject of everlasting controversy among those concerned with engineering valuation, utility rate-making and taxation" (p. 8). Unfortunately, such a millennium can not arrive, until writers on depreciation develop more reticence in their claims and more rigor in their proofs.

GABRIEL A. D. PREINREICH

New York

Internal Auditing—A New Management Technique.

John B. Thurston, Editor. (Stamford: Brock and Wallston, 1943. Pp. xi, 450. \$3.50.)

This book is described as a symposium of addresses, discussions and other material developed under the direction of the Institute of Internal Auditors. The addresses were presented to the members and guests of the Institute at meetings held from the date of its organization to its first annual conference in New York November 10, 11, 12, 1942. The discussions are those that followed the addresses. The material in the book was edited by John B. Thurston, first president of the Institute of Internal Auditors.

The timeliness of this review is slightly dulled by the advent of the second annual conference of the Institute held in New York October 10, 11, 12, 1943.

The addresses range in subject from an exploration of the functions of the internal auditor, his education and training, and his relation to the public accountant, to such widely separated subject matter as an address on the economic future of American business in South America.

The most provocative part of the book lies in that part as mentioned in the title, an exploration into the functions of internal auditing as a new management technique. The concept of the internal auditor in performing a new management technique, as expressed by several of the founders of the Institute, is his service as an appraiser of the results of all departments of a business and of the business itself. As an appraiser, the

internal auditor must be responsible to the board of directors only, or to the board through the top executive officers. Mr. Thurston has enumerated the three major functions which the internal auditor can or should perform as follows:

- (1) He directly participates in the verification of financial statements.
- (2) He rounds out and perfects the system of internal control.
- (3) Finally, but most important of all, the internal auditor acts as an arm of management. In this role, he is one of the principal means by which modern management achieves effective control over administrative activities.

The concept of the internal auditor as the arm of management, which is one of the principal means by which modern management achieves effective control, probably represents the goal toward which internal auditors individually and as an organization will strive. Although there are internal auditors who at present perform all the functions enumerated above, it is apparent both from some addresses and from discussions following the addresses that many members of the Institute do not fully comprehend the role which is contemplated for the internal auditor in the corporate organization.

This reviewer found the addresses relating to the development of manuals and reports for the internal auditor to be interesting and factual, and an aid to internal auditors in a phase of their work which is often enervated through devotion to other more pressing duties.

The organization of the Institute of Internal Auditors focuses attention to the ever increasing phase of the internal auditor in the corporation, and it is believed that the material, publication of which is sponsored by the Institute, is aimed more at directing attention to the field, than to exploring procedures to be followed in the performance of the functions outlined.

R. H. HASSLER

Connersville

Industrial Accounting in a War Economy. National Association of Cost Accountants Year Book, 1942. (New York: Pp. 213. \$3.00.)

Students, professors, and practitioners of accounting too often depend on textbooks and periodicals for their knowledge of accounting principles and practices and give too little attention to the current accounting and managerial problems which are discussed in such technical publications as those of the National Association of Cost Accountants. The 1942 Year Book of the NACA, entitled *Industrial Accounting in a War Economy*, is of special interest to accountants because it is a record of the discussions of the wartime problems which confront the industrial accountant and manager during the present abnormal conditions of production and distribution.

The Year Book is a record of the thirteen papers and discussions presented by prominent accountants and industrial leaders at the 1942 convention of the NACA which was held in Chicago. The discussions are grouped under the following topics: Wartime Problems

and Responsibilities, Wartime Inventory Problems, Accounting Problems Arising from War Contracts, Wartime Cost Problems, and Taxes and Post-war Problems.

The first topic, *Wartime Problems and Responsibilities*, is discussed in a paper by Harry E. Howell, Controller, Grinnell Co., in which he stresses the necessity for economy of executive time through the simplification and analysis of reports by accountants, the need for standard costs and better estimating on war jobs, and the adherence to price ceilings and government regulations. In the second paper, John C. Weigel, Regional Administrator of the OPA, describes the purposes and methods being used to control inflation. The topic is concluded with a technical description of the Allocation Classification System of the War Production Board by Edward A. Gould, Administrator for the WPB.

The second group of three papers deals with *Wartime Inventory Problems*. B. M. Sayre, Vice President, Rock-Ola Manufacturing Corp., describes the difficulties of maintaining material control for war production due in part to the acute shortages of materials but also due to the confusion and overlapping authority prevalent in governmental agencies. He especially advocates better training of employees and more flexible planning. J. C. Freeman, Works Accountant, Allis-Chalmers Manufacturing Co., emphasizes the necessity for perpetual inventory control for companies obtaining materials from the WPB in order to avoid delays in procurement and production. The third paper in this group, entitled *Inventory Valuation in a War Economy*, by Martin A. Moore, Controller, Hyatt Bearings Division, General Motors Corp., contains an excellent resume of the basic principles and methods of inventory valuation and their relation to price inflation. Of particular interest is his discussion of accounting devices, such as the *base stock inventory* method, the *last-in, first-out* method, and *inventory reserves*, used to counteract price inflation by eliminating inventory profits from operating results. Among the converts to the *last-in, first-out* inventory method cited are the U. S. Steel Corporation, Jones and Laughlin Steel Corporation, General Cable Corporation, R. H. Macy and Company, Gimble Brothers, and Kauffmann Department Stores. Other important problems discussed include: the inclusion in inventories of abnormal items such as excess labor costs, overtime premiums and training costs, the normal volume conception as related to inventories, pre-production expenses, and the obsolescence of inventories in the post-war economy. Mr. Moore's paper is the most complete and interesting discussion of a wartime accounting subject in the 1942 Year Book.

The third topic, *Accounting Problems Arising from War Contracts*, is discussed in papers prepared by Maurice E. Peloubet of the WPB and Roscoe Seybold, Vice President, Westinghouse Electric and Manufacturing Co. Mr. Peloubet presents an interesting discussion of the general problems involved in war contracts, including the government's attempt to eliminate risks for contractors, difficulties encountered in determining reasonable costs and profits, cost investigations, audits, and renegotiations. Mr. Seybold is critical of

conflicting directives and time-consuming questionnaires issued from Washington. He presents some of the technical aspects of conversion to war production, facility contracts, supplies contracts, escalator clauses, priorities and renegotiation.

The broad subject *Wartime Cost Problems* is discussed in three short papers. The problems of subcontracting, which include expansion requirements, procurement of equipment, financing new facilities, and maintaining cooperation with prime contractors, are briefly described by George M. Ebert, Controller, Curtiss Propeller Division, Curtiss-Wright Corp. The contrast between depreciation and amortization policies for tax requirements and for war contracts is clearly explained by A. B. Hossack, Vice President, American Appraisal Co. The third paper in the group, prepared by Leonard E. Zastrow, Assistant Controller, Bucyrus-Erie Co., is of particular interest to industrial accountants because it deals with abnormal costs. Mr. Zastrow discusses the treatment of variances between actual and standard costs, cost of extra watchmen, badges, floodlights, and stores-keeping, and concludes his paper with suggestions as to the allocation of abnormal general administration and selling costs.

The last section of the Year Book contains two papers in which *Taxes and Post-war Problems* are discussed by William J. Casey, Chairman, Board of Editors, Research Institute of America and James L. Dohr, Associate Professor of Accounting, Columbia University. Mr. Casey challenges the industrial accountant to aid business management in steering a "course through confiscatory tax rates, rigid ceilings over prices, steadily rising labor and other costs, and priorities which curtail volume and skyrocket unit costs" and to preserve and carry into the post-war era business assets, including plant, equipment, goodwill, production and sales organizations. Mr. Dohr climaxes the discussion of industrial accounting problems in his paper entitled *Anticipating Post-war Accounting Problems*. He explains that the post-war problems will include disposal of abnormally large war inventories, reduction and retraining of personnel, reaccounting and settlement of war contracts, recomputation of taxes, development of new products and markets, and acquisition of new working capital and equipment. He concludes that plans for the liquidation of war production and resumption of peacetime business should be made now.

Criticism of governmental agencies threads through the papers and discussions, but it is constructive criticism by men who are faced with the execution of governmental policies and directives and who are attempting to do a better job in the important war work they are directing.

The busy accountant who can budget very little of his time for reading may justly criticize publications such as the Year Book since they present verbatim the remarks of chairmen and comments of members who take part in discussions as well as the carefully prepared papers of the speakers. It might be suggested that proceedings of conventions be abstracted or abridged so that the main currents of thought might more readily be made available to the reader. However, it might be

said in refutation that such a process would eliminate much of spirit and freshness of the discussions and it most certainly would eliminate the choice bits of humor and sarcasm which may more than compensate the reader for his extra time.

The Year Books of the National Association of Cost Accountants are valuable contributions to the literature of industrial accounting.

JOHN G. BLOCKER

University of Kansas

Taxing to Prevent Inflation. Carl Shoup, Milton Friedman, and Ruth P. Mack. (New York: Columbia University Press, 1943. Pp. xii, 236. \$2.75.)

This book comprises four separate papers. Together they contribute a brilliantly executed application of modern economic theory and of refined statistical techniques to the solution of a practical economic problem; namely, the prevention of inflation.

In reading the book, one is impressed by the contrast between the scientific approach to the problem of inflation, admirably presented by the authors, and the "practical" approach as exemplified by the recent activities of the assorted governmental agencies responsible for actual policy. The discrepancies between the fiscal policies implicit in the argument of this book and the actual policies followed are indeed glaring.

The first paper under joint authorship is entitled, "A Technique for Estimating the Amount of Taxation Necessary to Avert Inflation." In it, an elaborate table is constructed (pp. 68-71), using four separate sets of assumptions regarding the impact of defense spending, to show the amount of additional tax revenue that would be needed in June, 1942, as compared to October, 1941, in order to avert inflation. Inflation, in this context, is defined as the kind of rise in prices where "money income is expanding more than in proportion to income-earning activity" (p. 5). It is estimated that 10 to 12 billion dollars of additional revenue would be required, and that to secure 5 to 8 billion of this amount new tax legislation would be necessary. These figures refer, of course, to a past period, and they are no longer relevant to policy in that period. They do indicate, however, the magnitude of the problem—even during the early stages of the war program—and they illustrate techniques that could be used in the framing of anti-inflationary fiscal policy in the future.

A significant conclusion from this study is that the amount of taxes necessary to avert inflation is much less than the amount required to balance the Federal budget.

The second paper, by Professor Shoup, advances the thesis that the anti-inflationary effect of taxation depends, not only upon the aggregate amount of revenue collected, but also upon the character of the particular taxes levied. The characteristics of taxes on sales, personal income, corporate profits, and spendings are examined with reference to their effect on potential price increases.

The individual income (withholding) tax is compared with a retail sales tax in great detail. He finds eleven advantages of a sales tax over an income tax

and twelve advantages of an income tax over a sales tax, and, even when these advantages and disadvantages are weighed with respect to their relative importance, no clear-cut preference is established. The ultimate conclusion is that it is probably desirable to introduce the sales tax before the income tax rates reach the heights that would be necessary without the sales levy. It is clearly stated, however, that this conclusion "implies no preference for the sales tax as a normal part of a peace-time revenue system" (p. 106).

The third paper, by Dr. Friedman, is an examination of various techniques for predicting the onset of inflation. The problem is to determine when, or to what extent, increases in spending will result in greater output, and when in higher prices. The problem involves, therefore, the dual prediction of spending and of output. The discussion consists chiefly of a critical analysis of the work of other writers in this field.

The final paper, by Dr. Mack, presents "A Technique for Analyzing and Anticipating Change in the National Income." This study is based upon a comparison of "ready purchase money" (rpm) and "goods ready for sale" (grs). Elaborate statistical tables are constructed to show monthly changes in the amounts of these aggregates and thus to estimate changes in the national income as affected by variations both in production and in prices.

HOWARD R. BOWEN

Washington, D. C.

American Business Law, Volume I. W. R. MacMillan. (Chicago: Walton Publishing Company, 1943. Pp. xxxv, 320, 186.)

American Business Law, Volume II. V. Winters Hoerr and Raymond J. Goss. (Chicago: Walton Publishing Company, 1943. Pp. xv, 447, 262.)

These are the first books in a new four-volume series. Volume I contains 370 pages of lectures or text material and 171 pages of abbreviated reports on 81 decided cases. The subject matter covers an Introduction to the Study of Law, the Law of Contracts, and the Law of Agency.

In the preface there is a statement that special effort was made to use language understandable to the layman, and in this particular Mr. MacMillan has succeeded admirably.

The author devotes four brief chapters to introductory material. He correctly believes that the student—who generally is a little impatient about the delay in getting started in the study of current cases and general principles—will obtain a better grasp of the work to follow if he gives considerable attention to a preliminary survey of the field of law—the origin and branches, the sources, classification of rights, definitions of various legal terms commonly encountered, remedies and procedures in general. The number of topics and length of treatment included in this part of the book seem to be a satisfactory compromise between the extremes of too little and too much.

The text or lecture material dealing with the law of contracts and agency consists of simple statements of the principles of law that are likely to be found in the

usual transactions of the layman and more particularly in those of the average business man. The abstract statements of rules are explained by simple hypothetical cases incorporated in the lecture material and amplified by reports of decided cases covering more complicated factual situations. The case reports are placed in the second half of the book, a practice fairly common though not approved by those who favor location nearer the point mentioned; e.g., at the end of the chapter. The emphasis is of course on substantive rather than procedural law.

Because the amount of substantive law is enormous and the time of the student for such study very limited, an author is compelled to choose carefully the points that are likely to be of most importance. And he will have many regrets that some points cannot be fully explained, or even mentioned. Any reviewer is apt to think that some topics have been unwisely omitted or in-

cluded, or that some have received attention more than their importance justifies. This reviewer thinks that this book is not more vulnerable to *such* criticism than most of the other texts in this field; and that on the whole, the work is well done.

Volume II includes the subjects of Partnership, Sales, and Negotiable Instruments. The method of treatment is substantially the same as that of Volume I. Particular attention is given to the uniform statutes covering the three branches of law, with reprints of the statutes placed for easy reference at the end of the respective sections.

The quality of judgment exercised in selecting the points to be emphasized and the skill used in explaining the application of the rules mentioned place this volume also in the rank of excellent presentations.

ELMER W. HILLS

University of Iowa

DICKINSON LECTURES IN ACCOUNTING

The Arthur Lowes Dickinson Fund was established in January, 1929, at the Harvard Graduate School of Business Administration by the firm of Price, Waterhouse & Co. "in recognition of the debt due by the accounting profession in general, and particularly by this firm, to a former partner, Sir Arthur Lowes Dickinson." The income from this fund was for a number of years used exclusively for the purpose of conducting research in the field of accounting. In 1936, the terms of the Fund were modified to provide that "in addition there may from time to time be appointed, for one year, a man outstanding in Accounting who shall deliver at the Graduate School of Business Administration one or more lectures, and shall be designated as Dickinson Lecturer."

The above is taken from the foreword of the volume in which are presented the first three Dickinson Lectures. A similar statement has appeared in the three volumes reproducing the lectures subsequently given. So modest an acknowledgment of the appreciation of the Graduate School of Business Administration, and of the accounting profession in general, of this contribution by Price, Waterhouse & Co. to the further development of accounting research may have peculiar significance in a field in which a major goal is that of presenting unadorned factual information. Professional standing comes not so much as a result of claims as it does from works of such character that professional standing is conceded by the public, and one of the tributes paid by the public is recognition of the fact that the subject matter in the field of the group in question deserves a place in the higher educational program which the public, through gift or taxation, supports. That his fellow partners should have taken this means of honoring the memory of Sir Arthur Lowes Dickinson is evidence of their faith in both the future of accounting and the role which higher education will play in its development. It is to be hoped that this Fund and similar funds, whether already active or yet to be created, will be regarded as evidence of a desire on the part of the profession to shoulder a part of the educational load essential to its continued progress.

That Mr. George O. May should have been named the first Dickinson Lecturer seems entirely fitting, not only because of his association with the firm of Price, Waterhouse & Co. nor because he succeeded Sir Arthur Lowes Dickinson as senior partner in the firm, but because in the American Institute of Accountants and in its predecessor organizations as well as outside of the organized accounting field he has been an able and active contributor to the development of both the theory and the practice of accounts as accounting has struggled to attain status as a recognized profession. Sir Laurence Halsey of the London office of Price, Waterhouse & Co. was obviously well qualified to present to Americans a summary of the activities of accountants in Great Britain. The qualifications of Professor Paton, cited in the foreword as "a nationally known and respected teacher," will not be challenged by anyone familiar with the development of accounting literature in this country.

Subsequent lectures have been given by men who have long been active in accounting and whose qualifications are well known. The lectures presented by Mr. Walter A. Staub (1940-1941) were the first to appear in the form adopted for publication of the Dickinson Lectures. A review of this book appeared earlier in the *ACCOUNTING REVIEW* (Vol. XVIII, No. 2, p. 178). Below are present reviews of the lectures of Professor, *Emeritus*, Henry Rand Hatfield (1941-1942) and those of Mr. Charles A. Heiss (1942-1943).

The accounting profession is indebted to those responsible for the decision to publish these lectures in a form available to the members of the profession and to the public at large.

S. G. W.

Dickinson Lectures in Accounting. George O. May, Sir Laurence Halsey, and William A. Paton (Cambridge: Harvard University Press, 1943. Pp. ix, 131. \$2.00).

Improvement in Financial Accounts. George O. May, 1936-1937.

This subject is discussed in three parts. The first lecture covers the historical aspects of the problem. After defining *financial accounts* as "those kept for the purpose of affording guidance in regard to the financial position and results of an enterprise—to either the management, the stockholders, or others," and uttering a warning that "the terminology of accounting is somewhat loose and vague," Mr. May traces the development of accounting thought and action with respect to such subjects as capital and income, dividends, the use of special-purpose statements, governmental regulation, the conventions reflected by financial statements, and some of the difficulties inherent in the preparation of reports which, in the words of Section 13 of the Securities Act of 1934, will "insure fair dealing in the (corporate) security."

The second lecture takes up the problem of uniformity in financial statements. The discussion is confined mainly "to the determination of income which is now generally recognized as the most important single problem in the field of financial accounting." Among the

more important specific questions likely to arise, Mr. May finds the following:

"(1) Shall the accounting in respect of fixed assets be historical in character and based on cost, or shall it attempt in any way to reflect changes in value other than those due to exhaustion of useful life? Subsidiary to this is the question—shall the charge for property exhaustion commonly spoken of as 'depreciation' be based on original cost, the present replacement value, or probable replacement cost of the property that is being exhausted?

"(2) On what basis shall inventories be stated—cost, cost or market whichever is lower, basic cost, normal cost, so-called standard cost, etc.?

"(3) How shall the premature termination of useful life be dealt with?

"(4) How shall corrections of estimates of charges or credits properly relating to the accounts of previous periods be dealt with?"

In these few remarks it is obviously impossible to follow the trend of the argument advanced by Mr. May. He is of the opinion that "uniformity in the treatment in operating accounts of routine transactions is undoubtedly of great value for a number of administrative purposes" and "that there is a closer approach to uniformity in the published accounts of the large steel companies than in those of the large railroads, though the former are not and the latter are subject to uniform classifica-

tion." Two factors appear to Mr. May to be the primary obstacles to attaining uniformity: "that income accounts are designed to serve more than one purpose" and that "accounting for income is based on more than one concept." In general, the discussion is well rounded and Mr. May would be among the last to expect that his conclusions would find universal acceptance. Undoubtedly he will receive strong support for such statements as: "Both the Bureau of Internal Revenue and the Interstate Commerce Commission have dealt with the question of fixed assets on the basis of historical cost, and it is difficult to see how any other method could as a practical matter be successfully employed"—"I am wholly opposed to the idea of writing property accounts up and down at frequent intervals as costs of replacement fluctuate"—"For this reason (in dealing with corrections of estimates and the treatment of items relating to the past which are either not discovered or not determined until later) and because the objective of bringing into each year all the items which strictly relate to its operation seems to me to be praiseworthy but unattainable, I am inclined to the alternative view that normally such items should be reflected in the income account of the year in which they are discovered"—and, finally, "It is apparent, first, that the interest of some groups is more direct and substantial than that of others, and, secondly, that some groups are better able than others to adjust accounts to fit their own requirements. In general, the individual stockholder has the most direct interest and is least qualified to make adjustments. . . ."

One may well expect less uniform approval of other statements. One illustration should suffice. In discussion the disposition to be made of the charge resulting from the premature termination of the useful life of an asset, Mr. May states: "Obviously, it is, properly speaking, a charge against the income over the years of the useful life which has now come to an end. Since the accounts of those years are closed and done with, the loss must be dealt with in some other way; and the question arises, shall its character as a charge against income control, and the loss be charged against income even though it is in the wrong year, or shall its relationship to the past determine the treatment, and the loss be charged against the accumulated undistributed income?"

"It does not seem to me that it is possible to lay down any rule to be universally applied. In the case of a business employing a large number of property units, where such occurrences may be frequent, it may well be that the most appropriate disposition of the charge is to make it against current income. Where the unit retired is a relatively large proportion of the total investment, such a charge would obviously result in a distorted income account."

To this reviewer, the conclusion might well be stated differently. It is obvious that this charge *should have been made* against the income over the years of the useful life which has now come to an end. Since the accounts of those years are closed and done with, and since all charges must, in the nature of things, fall against the income of one or more fiscal periods, the charge in question, not having been made against income during the useful operating life of the asset must

now be made against income in the year in which the asset life is terminated. Though the principle is unchanged, the point may be regarded as relatively unimportant if the charge is relatively insignificant, but if the unit retired is a relatively large proportion of the total investment, it is essential that the charge be made against income in the period in which the asset is abandoned in order to offset the obvious distortion of prior income accounts which were, after all, tentative in character.

The last lecture of the series is devoted to Practical Lines of Improvement in Financial Statements. Here, again, one finds expressions of opinion with which he is quick to agree or equally quick to disagree. Agreement seems apparent when Mr. May suggests: "The usefulness of financial accounts may be increased by improvements in either their substance or their form"—"accounting in respect to fixed assets must necessarily be in general based on cost"—"It should also be recognized that to a corporation its own capital stock can neither be an asset nor produce income"—"I should emphasize, first, the importance of consistency in accounting from year to year, and, secondly, the desirability of disclosing any exceptional items in such a way that those who may deem appropriate some treatment of an item other than that adopted in the accounts may be enabled to make their own adjustments" and "If we stop to consider what the investor is really interested in, the paramount importance of the income account and of statements of quick assets and liabilities at once becomes apparent, this importance resting on the simple ground that earning capacity and solvency are the most essential elements in commercial prosperity."

Unquestionably there are those who will not agree with Mr. May's opinion that "financial accounts must always be largely a matter of convention, judgment, and opinion" (in the degree of significance which he appears to accord these factors) and who will continue to hope that accounting will develop procedural standards to a point where it can avoid those diverse methods of treatment of like situations in the accounts of business enterprises which have continued to give rise to serious misconceptions, not only in the mind of the public, but also in the attitudes of business and financial leaders themselves, to the end that impressively certified statements (to paraphrase Howard Greer) of corporation finances may be increasingly significant.

The Position of the Public Accountant in Relation to Business and Government in Great Britain. Sir Laurence Halsey, 1937-1938.

The Dickinson Lectures in Accounting in 1937-1938 consist of two addresses by Sir Laurence Halsey, Partner, Price, Waterhouse & Co. of London. The title fairly describes the content of these papers. The lectures by Messrs. May and Paton are concerned primarily with "the improvement of accounting practice." Professor Sanders, in his foreword to the volume, expresses the idea that "it may at first seem paradoxical that the lectures dealing with English practice appear to be less concerned with improvement in practice and yet at the same time be able to portray a range of activities of the British accounting profession, and a place

in economic society, which notably exceed the corresponding achievements of the profession in America." The American reader may well be impressed by the notable array of responsibilities placed upon the profession in Great Britain and still experience definite disappointment that the discussion by Sir Laurence contains no information on the theoretical and procedural problems attending current British practice. It is interesting to learn, for example, that "In some industries wages vary according to sliding scales agreed between the trade unions and the associations of employers, which sliding scales depend either on the price of the product or on the profits of the business, and in these cases the figures supplied by or agreed between professional accountants representing the employers, on the one side, and the employees, on the other, are accepted without question as the basis of calculating the wages. In this way the accountant plays his part in the preservation of harmonious relations between employer and employee." It would be more interesting to this reviewer to know whether British accounting practice is so formalized that the "employers' accountants" and the "employees' accountants" have no significant differences of opinion as to the "proper" accounting for such matters as depreciation, patent amortization, stock dividends, redemption premiums on stock, the loss on the premature termination of plant life, and others of the myriad with which the American accountant appears to be perpetually plagued; and, if significant differences do exist, what steps are being taken by our British colleagues to discover or develop principles or rules or theories on which such differences may be intelligently resolved.

The first lecture is devoted to The Origin of the Profession and Its Function in Relation to Limited Companies. There is an easy transition to the second lecture dealing with The Function of Public Accountants in Relation to Public Institutions, Private Individuals, and Government Departments. The following comments are little more than interesting side-lights in these papers which might well be read by all American practitioners, teachers, and others interested in the development of the accounting field.

"The professional accountant's services were found to be of value in the administration of both the bankruptcy and the company laws. . . ."—"The accountant came to play his part in the working of this legislation (Trade Union Acts) and in the collective bargaining arrangements which became possible as a result of it."—"Steps were therefore taken to regulate the charges and profits of such undertakings (building societies, retail co-operatives, mutual benefit societies, etc.) and to procure publicity for and insist upon the audit of their accounts as one of the best means of checking malpractice."—" . . . after a disastrous bank failure in Glasgow in 1874 the accounts of all banks, other than the Bank of England, had to be audited and a copy of the audited balance sheet hung in the bank to show that it was solvent."—"In Great Britain, the professional accountant is an essential part of the machinery for raising capital by public subscription for business."—" . . . and for the last seventy years it has not been necessary for an auditor to be a shareholder; the result is that the auditors

of the great railways have for many years been professional accountants. . . ."

There appear numerous other interesting examples of the public accountant's participation in the economic life of the country; his connection with public utilities, with social welfare organizations; his services in connection with tax legislation and on various government committees. At the present time, the accountant's participation in certain matters is prescribed by law but Sir Laurence is of the opinion that until relatively recent years the development of accounting was "a growth not greatly fostered by any direct government action, but rather induced by a gradual recognition by the public—and later by governmental departments—of the utility of the qualifications possessed by its practitioners."

Not the least interesting observation is this: "The practicing chartered accountant is not permitted to carry on any other business or profession."

Recent and Prospective Developments in Accounting Theory. William A. Paton, 1939-1940.

In the third series of the Dickinson Lectures there is a return to the major problem of the development of accounting theory and procedure. To his task Professor Paton has brought the vitality and lucidity for which he has long been widely known. To summarize, digest, or outline his remarks would require a paper substantially comparable to the lectures under review. This reviewer regards his assignment as far less comprehensive.

Professor Paton's remarks appear under four major headings:

The Focus of Accounting
Measurement of Performance
The Period of Reckoning
Costs and Values

In the Preliminary Considerations are found two or three items of considerable import. *Accounting* is defined as "a synthesis of concepts, rules, and techniques designed to facilitate understanding and control of economic activity. . . . Accounting tries to *measure* economic forces in financial terms and to *communicate* the results of such measurement to interested parties." "*Accounting theory* is the core of the propositions, doctrines, and policies distilled from an appraisal of the purposes of accounting, an examination of the milieu in which accounting has its being, and a critical analysis of the nature of accounting practice." What might be termed the *Touch Patonesque* appears in his insistence that theory and practice are not in opposition, that "theory is both an analysis of practice and framework for practice," that "Theory is in large measure the product of practice and at the same time the post to which practice is tethered (although sometimes by a very long rope)."

Not the least of Professor Paton's contributions is his outline of the hallmarks of good theory—"characterized by clarity and orderliness; it should be schematic, have pattern,"—"in harmony with observable, objective factors and conditions in their basic relations,"—"a closely related criterion is the flavor of impartiality,"—"finally, in a purposive field like accounting there should be in theory just a tincture of forward-looking, a trace of policy forming, a bit of leaven for the load of practice." Too much of the recent writing in accounting has

been in large measure unmarked by these essentials.

In *The Focus of Accounting* there is a reaffirmation of the author's support of the "business-entity concept of accounting," but there is the admonition that accountants should not close their minds to alternatives. The corporation may be a legalistic monstrosity without particular accounting significance while a branch, department, subsidiary company or other unit "may have more vitality and significance in certain connections than the company viewed as a whole." On the contrary one finds circumstances in which the corporation is far more significant as a semipublic institution than as a legal entity. The author urges further attention for departmental reports, for the changes likely to follow the "amazingly rapid strides toward complete governmental control of business."

The lecture dealing with Measurement of Performance contains an interesting array of moot questions. Minor emphasis is accorded the revenue side of the problem with Professor Paton's departure from the accepted measurement of revenue "by the volume of sales" only long enough to contend that a good case may be built up for recognizing revenue in terms of collections from customers. Not even momentarily does he associate revenue with the classical "lucky buy"! His discussion of the left-hand side of the picture is a well-ordered presentation of many of the major problems of asset recording and cost allocation, with sound warnings against several types of cost favoritism: class favoritism, department favoritism, and period favoritism. No attempt will be made here to present a *Reader's Digest* version of the interesting details of this or the subsequent lectures.

The lecture on The Period of Reckoning is built primarily around two phenomena, the increase in the use of short-term statements and the tendency of business toward stabilizing or "smoothing" the income curve. To offset the weaknesses inherent in short-term statements Professor Paton advocates a procedure of "supplementing the annual reports" rather than "doctoring them" and points out that greater use should be made of comparative, cumulative, and average income statements together with further use of well-arranged statements of funds. There is an excellent discussion of "self-insurance." An outline of his objections to the "last-in, first-out" panacea is superior to any advocacy of LIFO which has come to the attention of this reviewer.

The concluding lecture, Costs and Values, reiterates much of Professor Paton's earlier pronouncements on this subject. Attention is given to stabilized accounting, plant valuations, and the accounting problems inherent in the attempt to introduce into the accounts "values" other than costs.

There are two fallacies which may serve to introduce a conclusion: (1) Accounting teachers are never without time for reading and (2) Accounting practitioners rarely work between March 15th and the following fall. On firmer ground is the suggestion that any accountant, teacher, or practitioner, who finds himself possessed at once of the time and the ability to read should place these lectures near the top of his "must" list.

SIDNEY G. WINTER

University of Iowa

Surplus and Dividends. Henry Rand Hatfield. (Cambridge: Harvard University Press, 1943. Pp. x, 48. \$1.00).

Professor Hatfield's material on *Surplus and Dividends*, originally presented as the Dickinson Lectures in Accounting, 1941-1942, at the Graduate School of Business Administration, Harvard University, is a worthy contribution to accounting thinking. Professor Hatfield has assembled various, and frequently contradictory, conclusions both as to the nature of surplus and dividends and as to accounting practices relative thereto. The attitudes of the authorities in the field are arrayed against each other, aligned with Professor Hatfield's own attitude, or his attitude opposed to theirs. One cannot read this material without being impressed with the gaps that exist between the thinking of the authorities, as well as with the need for constructive education respecting the fundamental purposes of accounting, its basic concepts, and its relation to other fields.

Much of the disagreement in Accounting which Professor Hatfield casts up may be traced to the lack of acceptance of uniform fundamental concepts—a state of affairs which is probably to be expected, since both philosophy and art exercise their respective influences and the related fields of endeavor naturally color the varying approaches to the subject. It is easy to understand, therefore, why Professor Hatfield found so many things to challenge. Professor Hatfield's definitions and conclusions deserve the serious contemplation of accountants. Illustrative of these are the following:

"In the technical accounting jargon, capital is a credit account, denoting proprietorship, while capital assets are debits—indicating something owned—and never the twain shall meet." (p. 3)

"Just as capital to the accountant is a mathematical limitation rather than a fund of assets, so surplus, to the accountant, is a mathematical measure, if not a limitation, rather than the excess assets." (p. 8)

"Accounting is not at all, or only incidentally and in subsidiary records, concerned with weight or superfluous or number, but only with values, i.e., the number of monetary units attributed to the item." (p. 36)

"The significance of corporate capital is in connection with the generally found limited liability of the stockholders of a corporation, in contrast to the unlimited liability of the several partners . . . to offset the disadvantage of being unable to hold the individual stockholders liable for debts the latter, unlike the individual trader or the partners, must be restricted as to the amount which they could legally withdraw from the enterprise." (p. 4)

"Paid-in surplus may be looked upon as a buffer to absorb losses so that unless the total losses exceed the amount of the paid-in surplus, there will be no impairment of stated capital." (p. 4)

"The accountant is not concerned with the foolishness of a transaction but whether the transaction took place." (p. 12)

The above indicate quite adequately that Professor Hatfield sees clearly the difference between the significance of assets and the significance of equities; that accounting is not management but that the accountant's

task, specifically, is to prepare the record and to submit statements drawn from the records; that corporate proprietary procedures are to a certain extent adaptations designed to exhibit legal relationships; and that managerial freedom may legitimately require the accountant to record a considerable portion of the investment contribution in accounts other than those exhibiting the full legal restriction. These things are of great importance—in the first instance to accounting theory, in the second instance to accounting procedure. They are starting points, concepts, which must be kept in mind in developing the accounting philosophical structure.

Professor Hatfield's disposal of the arguments frequently advanced against the recognition of appreciation is also worthy of commendation. The following sample is representative. "It is," he states, "not consistent to object to showing appreciation, say of real estate, and to allow it merely because the assets are greater in size, as the trees, or in number in the case of the increase of a flock." (p. 37), since "... it is inconsistent to show an increase in value if accounting is concerned only with costs, and illogical to argue that the increase in market value, due to increased bulk, is different from an increase due to an increased demand for paper pulp." (p. 36) And again—"... advocates of the theory that cost is the basis of all accounting ... must perform intellectual gymnastics to argue that the cost of a given mining property has changed because unanticipated resources are discovered." (p. 37)

Indefensible conclusions as to the disposition of the credit recorded when appreciation is recognized are accorded similar treatment. The argument, for instance, that "when appreciation is first recorded it represents capital surplus, but that by a strange metamorphosis when the asset is sold it becomes earned surplus" is countered with: "Can the Ethiopian change his skin, or the leopard his spots?" (p. 42) Professor Hatfield's own conclusion is that "... the preferable procedure is to show the increase in net worth in a special subdivision of surplus which may well bear the descriptive title Surplus Arising from the Revaluation of Assets, or more simply, Revaluation Surplus, or Appraisal Surplus. The reader of the balance sheet is by this warned that the item does not represent ordinary earnings, but is left uninstructed as to whether it approximates premium on stock. He should infer, as S. J. Broad says, it represents an increment and thus has the nature of profit, rather than capital." (p. 43)

It is to be regretted that Professor Hatfield did not emphasize the fact that much of the confusion respecting the appreciation credit arises from the switching of theories and the hesitancy to apply the economic principle to the right-hand as well as to the left-hand side of the balance sheet. If the accountant departs from the cost thesis and recognizes appreciation, the credit is equally as representative of economic income as the debit is of economic value. Economically, the income involved should therefore be earmarked as a portion of earned or income surplus.

Turning from the positive one notes that Professor Hatfield himself appears to be guilty, in two or three

spots, of errors similar to those that he marshals from others. He states, "In this country accountants have considered that impaired capital must be made good before dividends may be paid, and this is rather generally implied in corporation laws of the several states" (p. 26). This may be good policy, although there are situations in which it is justly subject to question. But how should the impaired capital be made good? Out of future earnings? If this be so, then the earnings out of which the impairment is to be made good must be earnings. This would appear to be self-evident, but on the same page Professor Hatfield states that "If one disregards legal regulations (yet Professor Hatfield bases his whole argument respecting the nature of capital upon legal regulations)¹ and views the problem in its accounting aspects, the argument seems against recognizing profit despite previous deficit. Certainly it may be argued that if a corporation has incurred a deficit of \$10,000 and in the next period makes a gain of \$1,000, it is not correct to say there has been any net profit. The corporation has \$9,000 less net assets than at the beginning. Surely there are no net earnings. Whether a dividend is permissible is a matter determined by statute. But to interpret a dividend, paid when there is an operating deficit, as a distribution of profits is an accounting absurdity. And, as has frequently been pointed out, a continuing policy of so doing in a business with alternating periods of prosperity and depression, might conceivably result in a gradual elimination of all the contributed capital while dividends had been paid, say in alternating years, throughout the decadence and destruction of the enterprise." What of it? Professor Hatfield has stated (p. 12) that "The accountant is not concerned with the foolishness of a transaction but whether the transaction took place." How does the destruction of capital by losses in poor years prove that dividends paid in good years are not distributions of profit? Why is it an accounting absurdity to speak of the \$1,000 earned in the second year of Professor Hatfield's illustration as net profit? The income statement so designates it. The operations of the second period were conducted with less capital than were the operations of the first period and as such there was returned a net gain. To an individual who purchased stock in the corporation subsequent to the incurrence of the deficit and at a price conditioned thereby, a dividend distributed from the \$1,000 of earnings could represent nothing but profit. To conclude that as a matter of policy the net gain should be retained for the purpose of repairing the impaired capital may be proper—although it is not within the accounting sphere to make this decision—but to deny that there is an accounting net profit is something entirely different. On page 27 Professor Hatfield, in connection with a different situation, states that "... it is clear that a payment from the earnings of the year is not paid out of the contributed capital." Then why does not such a payment represent net profit? Simply because Professor Hatfield's thinking, consciously or unconsciously, assumes a whole-life viewpoint rather than a fiscal-period viewpoint. The net profit of the income statement is not the net profit of the balance sheet—the latter can

¹ Supplied by the reviewer.

be determined only by securing the algebraic sum of the fiscal-period gains and losses. From the accounting standpoint the fundamental issue is whether net profit should be determined from a whole-life or a fiscal-period viewpoint. If the former is to govern, it would surely seem that income-statement revisions are in order. This, it should be noted, the *Tentative Statement of Accounting Principles*, prepared by the American Accounting Association, proposes and would, on Professor Hatfield's basis, appear to deserve more than the "faint praise" that he appears to give it (pp. 15-18).

One wonders what Professor Hatfield's position would have been had his illustrative corporation possessed a "capital" surplus against which the deficit of the first year could have been charged. Would the \$1,000 profit of the second year have represented a net profit and would it have been reasonable to interpret the distribution of a dividend charged against this profit as a "distribution of net profits," or would such an interpretation still be an "accounting absurdity"? The corporation, similarly, would have had less net assets than when it began, less net assets than contributed by the stockholders. It would seem, therefore, that it would have been as much of an "accounting absurdity" in the one case as in the other. This would appear to lend support to the thesis that premium on stock—capital surplus—is accounting capital rather than accounting surplus. Professor Hatfield declares it to be legal surplus but that begs the accounting question. There should be consistency—either the accounting or the legal view should govern both cases. Professor Hatfield appears to shift from the legal base in the one case to the accounting base in the other.

In discussing the propriety of recognizing appreciation Professor Hatfield states that "... it is neither axiomatic nor true that in everyday practice accountants refrain from marking up assets. The irrefutable proof is found in probably universally sanctioned treatment of a discounted note receivable. If a noninterest-bearing note of \$1,000 is discounted for \$970, I think no accountant denies the propriety of inventorying the note three months later at \$985. . . . To mark it up from \$970 to \$985 is indisputably the showing that the particular asset is worth \$15 more than when first acquired. It is immaterial that there is a specific contract and hence a difference between the note and a certificate of stock. If it is legitimate to recognize the increase in value due to the approaching maturity, there needs be some specific reason given for not recognizing some other increase in value, caused by industrial or market conditions. . . . If the argument were sound (which it is not) that the appreciation of the discounted note may be recognized because it contains a definite promise, the element which justifies appreciation should be certainty of value, not its legal character. But is it certain that the note on December 31 is really worth \$985. Does one know that it will be surely paid April 1? Does one know that the maker will not be bankrupt and unable or unwilling to pay the note?" (Pp. 34 and 35.) Professor Hatfield ignores one or two important points. Support for appreciation, or value, must be found in the market. Support for the increased "recorded worth" of the note is found in the contract and in accounting assumptions.

The statement "To mark it (the note) up from \$970 to \$985 is indisputably the showing that the particular asset is worth \$15 more than when first acquired" has special meaning from the accounting and contract points of view; it is not necessarily true from the market point of view. A change in the market rate of interest subsequent to the origin of the note may cause the note to be worth more or less than \$985 on the market, after three months had elapsed. Still it is not usually suggested that this economic or market difference be recognized. It is the accounting difference that concerns the accountant and thus it is hardly true that "It is immaterial that there is a specific contract . . ." This seems to indicate a basic difference between the case for recognizing the "increased accounting worth" of a discounted note and the case for recognizing the increased market worth of other assets. From the accounting standpoint it may be assumed that a non-interest bearing-discounted note is the same as an interest-bearing note, except for the manner of drawing the contract and computing the interest. The fundamental economic ends sought are the same. From the income-point of view the recognition of the accrued interest receivable (and such it would appear to be in spite of the absence of its contract designation as such) is necessary in order that the income earned by the waiting service rendered may be recorded. The increased accounting value of the non-interest-bearing note subsequent to its origin is best interpreted as resulting from the pro-rating of an amount made definite by contract which covers services rendered,² and which in all probability will be collected. The procedure is an integral part of the accrual thesis and is closely allied to the recognition of income upon the basis of outstanding accounts receivable. In neither the case of the accrual sale nor the case of the accrual interest is it certain that the receivable will be collected. If the lack of absolute certainty were a true obstacle the accountant would of necessity be compelled to deny the whole accrual procedure. The fundamental points at issue are whether the increased accounting value which comes into being in the case of a non-interest-bearing note has the same support as appreciation, whether services have been rendered in both cases, whether both are crystallized by contract, actual or implied, and whether the certainty of collection is at least equal to that assumed for the usual account receivable.

On page 46, Professor Hatfield states that "From the accounting point of view there is no material difference between a written promise to pay a dividend eighteen months later, and a book entry to the effect that such a dividend is to be paid in cash. In either case the actual payment of cash is not a payment of the dividend but rather the payment of a debt . . ." It would appear to follow that if a dividend is to be paid—Professor Hatfield repeatedly speaks of the payment of a dividend—and it is not paid when the cash is disbursed, it must be paid at the date of declaration or the date of record. But if it is paid at such date why is the cash disbursed later? Or can it be that the disbursement of the cash is

² Note that on p. 42, Professor Hatfield states that accrued interest is earned.

both the payment of a debt and the payment of a dividend? Or perhaps dividends are never paid.

As Professor Hatfield has demonstrated, there is much confusion and much contradiction in accounting thinking. Many of those who have been guilty of literal misstatement, however, have been striving for a better philosophical accounting foundation. Their error lies in their failure to redefine their terms properly or to limit their statements properly. Professor Hatfield classifies premium on stock as surplus, and according to his definition it must be granted to be such. Capital, Professor Hatfield limits to that which is so defined legally. Those who classify premium as capital are indicted, apparently. But why should the legal and accounting concepts of capital be the same? Does not both that which is designated as capital legally and that which is designated as premium usually represent investment—stockholders' contribution? And if so, should not both be classified similarly, accountingly, even though sub-classification may be desirable for service purposes? Accounting is caught between the law and economics. In all cases the decision, if at all possible, should be an accounting decision—not necessarily dictated by either the law or economics. The accountant's task is to build his own structure. If this can be done through the aid of terms used differently, perhaps, in other fields, well and good; if not, other terms should be substituted. It is the concept and purpose that should govern rather than the rigidity of terminology.

Similarly, much of Professor Hatfield's discussion as to whether dividends can or should be charged to premium on stock appears to rest on a dual accounting and legal use of the term. Those who contend that dividends should not be so charged seem to believe that a dividend, accountingly, is a "distribution of profits." Professor Hatfield, who appears to use the term dividend to cover any legal distribution to stockholders, whether "liquidating" or "earned," holds that they may be so charged. Reconciliation may be accomplished by redefining the term dividend, accountingly, or by eliminating it entirely and substituting a new term.

Professor Hatfield has rendered a distinct service to accounting in casting up the differences, the contradictions, the misunderstandings which accounting literature expresses on the subjects of surplus and dividends. There remains, however, a necessity to build the new as something distinctly accounting, a necessity to consolidate the evidences of that development that have appeared in various places. Professor Hatfield's failure to draw, uniformly, accounting rather than legal and economic conclusions is, perhaps, the one weakness of the material.

GEORGE R. HUSBAND

Wayne University

Accounting in the Administration of Large Business Enterprises. Charles A. Heiss. (Cambridge: Harvard University Press, 1943. Pp. 68. \$1.25.)

Mr. Charles A. Heiss is the first of the Dickinson lecturers to be selected from the field of private industry, but as such he has continued brilliantly the high standards established by his predecessors from the pub-

lic accounting and academic fields. His remarks are a gratifying demonstration of the fact that a broad perspective and a philosophical assaying of accounting are not confined to those who are not concerned about its immediate "practical" aspects.

Mr. Heiss' subject is Accounting in the Administration of Large Business Enterprises, treated "in the main, from the viewpoint of the student who seeks information regarding the work and responsibilities of the 'administrative accountant'." He develops his subject against a background of a generation of service with the American Telephone & Telegraph Company, including twenty-two years as comptroller during a period when accounting problems confronting business were multiplying and ramifying at an unprecedented rate. The choice of subject is a fortunate one, for administrative accounting problems are continuing to increase in number and complexity, and the approach to the subject is equally fortunate, for never was there more imperative need to enlist the talents of capable young men, and women, in the solution of those problems.

Mr. Heiss expresses his appreciation of the value of sound accounting theory and the importance of the work of the independent professional accountant in developing and buttressing the work of the administrative accountant, but, as he says, "the actual performance of the accounting presents the prime undertaking" and it is to that performance that he devotes the major portion of his remarks. The responsibilities of the administrative accountant for the integrity of the accounts are well defined, as is the function of accounting in business, with particular stress on the importance to the administrative accountant of familiarity with the technical conditions of the branch of industry of which his undertaking is a part. It is pointed out that no accounting department attains its greatest usefulness until it becomes a fact-analyzing and fact-interpreting organization, but Mr. Heiss confesses that there are limitations in accounting statements, and suggests that an important function of the administrative accountant is to call attention to them if they exist.

His extended service in a business subject to close governmental regulation has made Mr. Heiss well qualified to speak of administrative accounting as affected by governmental requirements, which he does with fairness and intelligence. At a time when the demands of government are becoming more and more exacting, and costly, it is encouraging to find a business man who sees so much that is constructive and helpful in governmental regulation, and who is sincerely hopeful that "we may reasonably expect that government representatives will be liberal and constructive in the formulation and interpretation of their instructions." At the same time, he admits that accounting systems made effective by government have not been imposed primarily to meet the internal administrative needs of the companies regulated. It is Mr. Heiss' opinion that the establishment of such systems involves a vital change in the attitude of the chief accounting officer toward the accounts of his company.

The necessity for internal audits and verifications to assure the administrative accountant that his results are correct is brought out, with the suggestion that a

primary consideration is the degree of assurance which is essential. The strategic position which the administrative accountant occupies in a modern enterprise is convincingly presented. The qualifications which the accountant must have to assure himself that strategic position are also well set forth.

Mr. Heiss emphasizes the importance of the special work which a well organized accounting department should be prepared to do, particularly statistical activities. The importance of statistics and the correlation of accounting and statistics receive appropriate consideration, with special recognition to the value of graphic presentation. An informative illustration of the use of statistics is given in relation to the actuarial problems surrounding a pension plan.

Other informative illustrations of the problems confronting the administrative accountant relate to depreciation and to the development of systems and procedures, including some valuable criteria to be employed

in determining the advantages to be derived from mechanical accounting equipment.

The value of budgets and budgetary control is commended, but not without admonition as to their limitations and as to the need for flexibility and continual readjustment.

Mr. Heiss has contributed to accounting literature an interesting and inclusive summation of administrative accounting as it exists today at its best, and holds forth an attractive picture of its future as a growing social science. In his own words, "the administrative accountant must let his mind be bold" and, as a vital adjunct of business management, "must assume a three-fold responsibility and recognize the fact—that it is a professional trustee acting in the joint interests of owners, workers, and customers."

GEO. D. BAILEY

Detroit

ASSOCIATION REPORTS FOR THE YEAR 1943

ELECTION OF OFFICERS

THE nominating committee, consisting of H. T. Chamberlain, chairman, and Messrs Elwell, Himmelblau, Kohler, Paton, Scovill, Stevenson, Taggart, Winter, recommended the following slate to the membership:

President:

Carman G. Blough, War Production Board,
Contract Review Branch

Vice Presidents:

Thomas W. Leland, Texas A. & M. College
Charles J. Rowland, Pennsylvania State
College
Leo A. Schmidt, Harvard Graduate School of
Business Administration

Editorial Board:

Stephen Gilman, International Accountants
Society
A. C. Littleton, University of Illinois
C. Rufus Rorem, American Hospital Association

Secretary-Treasurer:

Geoffrey Carmichael, Indiana University.

Director of Research:

Robert L. Dixon, Jr., University of Michigan

By authorization of the Executive Committee, members were asked to vote by mail ballot for or against the entire slate. The vote was 712 favorable, 3 unfavorable. The above, together with the three immediate past presidents, A. C. Littleton, H. F. Taggart, H. T. Chamberlain, constitute the Executive Committee for the year 1944.

A MESSAGE FROM THE PRESIDENT

Educational institutions and programs are all being subjected to special stresses and difficult restrictions during the war. The programs of most colleges and universities in fields customarily followed by men have had to be materially curtailed or completely eliminated. At the same time, the war has brought increased needs for the

services of accountants, both public and private, and at the same time has severely reduced the necessary personnel to meet such needs. These are challenges to the members of this Association for the policies that are developed under present conditions will seriously affect the future of accounting education and practice. We who have not been called to the field of battle owe it to the members of our profession in the armed forces, to maintain sound policies and procedures both in education and in practice so that when they return, they may find that their chosen field of endeavor has been put in shape to deal constructively and effectively with the many serious problems of adjustment that will face us all at that time.

I undertake the task of guiding the policies of the American Accounting Association during the coming year with considerable trepidation and I bespeak for myself the backing and assistance that have heretofore been given to my predecessors. I have no doubt that it is the wish of each member that the Association shall develop and strengthen during this period, but it will require strong efforts on the part of each of us to bring this about. We are all much concerned with the problems of our daily employment, but I trust the importance of the work of the Association and its impact on the broad problems of war and post-war business will be recognized and the necessary time taken to suggest, assist and strengthen the development of an effective program for the coming year.

CARMAN G. BLOUGH

REPORT OF COMMITTEE ON MONOGRAPHS

The work of the Committee on Monographs during the year has been devoted primarily to two projects. The first con-

sisted of preparing a compilation of the releases and pronouncements on accounting matters issued by the Securities and Exchange Commission, the Committee on Accounting Procedure and the Committee on Auditing Procedure of the American Institute of Accountants, the Executive Committee of the American Accounting Association, and the Committee on Stock List of the New York Stock Exchange, for the purpose of reprinting in one convenient volume. The work of editing the S.E.C. material for this purpose was done by Mr. W. W. Wernitz, chief accountant of the Commission. The second project was the preparation of a monograph on the principles of consolidated statements. This monograph was written by Dr. Maurice Moonitz of Stanford University, and was reviewed and approved for publication by the Committee.

Unfortunately the paper shortage has delayed publication of the results of these two projects. It is hoped that it will be possible to proceed with publication in the near future.

The Committee has also given some attention to two or three other projects and manuscripts, but without taking any definite action.

GEORGE D. BAILEY

STEPHEN GILMAN

WILLIAM A. PATON, *Chairman*

REPORT ON THE ACCOUNTING REVIEW

Policies. The plan under consideration for some time of giving fifty reprints to each contributor has been put into effect. A strong effort is to be made to mail each issue early in the scheduled month. Variety in the topics is desired. A number of people have consented to act as associate editors; their work and that of the department editors has been very helpful.

War. Several effects are evident. Limitations have been placed on available

paper; total annual pages may be less than before, but we can count on enough paper for close to one hundred pages of text quarterly. Inexperienced and insufficient help has slowed down the printers; it now is usually six weeks from copy to mailing. Advertising still holds up—48½ pages in 1943 compared to 49½ pages in 1942.

Departments. There are fewer books for review now than formerly. But CPA examinations go on as usual and so does the examination department, although the new copy dates put its editor under pressure at times. A section has been called "Association Reports"; it is available to officers and committees as an avenue of communication with the members. Numerous favorable comments have been received about the series called "Representative College Programs," which is not yet complete. The columns of the Accounting Exchange have been used, not with the intention of editorializing, but with the hope that ideas put forward in this manner would constitute an open invitation to contributors to offer their discussion, criticism, or protest.

Articles. In the four issues, April, July, October, 1943, and January, 1944, there are forty-five articles. Of these twelve came by the contributor's own initiative; eleven originated in the regional programs of 1943 (with some left over for later numbers). The remaining twenty-two came as the result of personal solicitation by editors and others.

Single copy orders for the ACCOUNTING REVIEW have sometimes been noticeably heavy. Permission has been granted to republish David R. Anderson's paper in *The Controller*; and a distribution is being made of 10,000 reprints of the paper by K. Y. Siddall. We have entered upon exchange relations with a number of state societies and public accounting firms which publish periodicals; mention is often

made in those publications of articles in the ACCOUNTING REVIEW.

Editorial Board

H. T. CHAMBERLAIN

A. C. LITTLETON

C. RUFUS ROREM

SIX REGIONAL PROGRAMS

Between June and December six regional programs were set up in the name of the American Accounting Association. At the usual sessions the average attendance was between 40 and 50 people; at some of the banquet sessions the number was much larger; in St. Louis, for example, where the President of the American Institute of Accountants was the speaker, attendance was about two hundred.

In the six meetings, twenty-eight papers were read and five round tables or panel discussions were conducted.

A fine spirit of cooperation was evident throughout between teachers and various groups of practitioners, including state societies of CPA's, local NACA chapters, chapters in the Controllers Institute, and the American Institute of Accountants. The teachers particularly were pleased, for they met so many practitioners.

The Association is especially appreciative of the services rendered by the people who planned and conducted the several programs and for the assistance rendered by the neighboring schools and faculty. The chairmen were as follows:

New Orleans, Professor Paul C. Taylor, Tulane University

Cincinnati, Professor Russell S. Willcox, Ohio State University

Boston, Professor Ross G. Walker, Harvard Graduate School of Business Administration

Chicago, Professor A. C. Littleton, University of Illinois

St. Louis, Professor John J. Lang, St. Louis University

Berkeley, Professor Perry Mason, University of California

The several programs are outlined below.

NEW ORLEANS, JUNE 26, 1943

Morning Program

Presiding: L. J. Buchan, Dean, College of Commerce and Business Administration, Tulane University.

Papers: "Differential Costs" by Professor Earl A. Saliers, Louisiana State University.

"Graphic Analysis of Costs" by Professor L. F. Brush, Louisiana State University.

"The Service the CPA Can Render" by Thomas A. Williams, of F. W. Lafrentz & Co., New Orleans.

Luncheon

"A Toast to Professional Accountants," Professor William Carr, Loyola University.

Afternoon Program

Presiding: Edward Rittler, of Moses, Rittler and Dienes, New Orleans.

Papers: "The CPA Examination" by Dick Quinn, of Dick D. Quinn & Co., Jackson, Mississippi.

"The Profit and Loss Statement: recent trends as to form, function and interpretation" by Professor Arnold W. Johnson, Tulane University.

"Accounting Practice under the Securities Act of 1933" by Harry John Williams, of Peat, Marwick, Mitchell & Co., New Orleans.

CINCINNATI, SEPTEMBER 16, 1943

Joint Meeting with the Ohio Society of Certified Public Accountants

Morning Program

Presiding: Raymond E. Glos, Dean, School of Business Administration, Miami University, Oxford, Ohio.

Round Table: "Some of the Wartime Problems we are Facing in the Classrooms and Postwar Changes in Accounting and Business Programs." Leader: John F. Sherwood of Southwestern Publishing Co.

Luncheon

Afternoon Program

Presiding: Professor Arthur W. Holmes, University of Cincinnati.

Round Table: "Some of Industry's Postwar Problems and the Outlook for the Future." Leader: K. Y. Siddall, Controller, Procter & Gamble Co., Cincinnati.

CHICAGO, SEPTEMBER 30, 1943

Morning Program

Presiding: Professor F. H. Elwell, University of Wisconsin.

Papers: "Simplification of Federal Tax Administration" by Professor William A. Paton, University of Michigan.

"Current Problems in Cost Determinations" by Paul Grady of Price, Waterhouse & Co., New York.

"Some General Cost Principles" by A. L. Prickett, Dean, College of Commerce, Indiana University.

Luncheon

Afternoon Program

Presiding: Professor E. A. Heilman, University of Minnesota.

Papers: "Progress in CPA Legislation" by Professor Ralph L. Boyd, Western Reserve University.

"Qualifications for a Professional Career" by E. B. Wilcox of Edward Gore & Co., Chicago.

"Accounting Principles and the Current Classification" by Stephen Gilman, Educational Director, International Accountants Society, Inc.

Dinner

"Testing for Aptitude," Professor R. W.

Tyler, Chairman, Department of Education, University of Chicago.

BOSTON, OCTOBER 9, 1943

Morning Program

Topic: "Industrial Controllershship and Cost Accounting."

Presiding: Charles W. Tucker of Charles W. Tucker & Co.

Papers: "The Function of Industrial Controllershship" by David R. Anderson, Controller, Kendall Co.

"The Teaching of Industrial Accounting" by Professor Wyman P. Fiske, Massachusetts Institute of Technology.

Luncheon

"What Next in Europe?" Professor J. Anton de Haas, Harvard Graduate School of Business Administration.

Afternoon Program

Topic: "The Teaching and Practice of Public Accounting."

Presiding: Professor Thomas H. Sanders, Harvard Graduate School of Business Administration.

Papers: "Professional Accounting Practice Today and Tomorrow" by Donald P. Perry of Lybrand, Ross Bros. & Montgomery.

"Training for the Public Accounting Profession" by Professor Richard S. Claire, Harvard Graduate School of Business Administration.

ST. LOUIS, NOVEMBER 30, 1943

Morning Program

Presiding: Wm. Charles of Price, Waterhouse and Co., St. Louis.

Papers: "Educating the Accountant to Meet his Postwar Responsibilities" by Professor F. H. Elwell, University of Wisconsin.

Round Table: "Business Education after the War." Panel Discussion by—

Professor S. A. Marsh, Washington University

Professor H. T. Scovill, University of Illinois

Professor R. D. M. Bauer, University of Missouri

Dean R. M. Cantwell, St. Louis University

Dean W. H. Stead, Washington University

Luncheon

Topic: "Practice of Accounting Under Regulatory Laws"

Presiding: Edwin H. Wagner, Sr., of Touche, Niven & Co., St. Louis.

Round Table:

"The Missouri Law," L. J. Muren

"The Illinois Law," H. T. Scovill

"The Wisconsin Law," F. H. Elwell

Afternoon Program

Joint Meeting with the Missouri Society of Certified Public Accountants

Presiding: A. H. Hebrank, President, St. Louis Chapter, Missouri Society of Certified Public Accountants.

Papers: "Special Relief-Excess Profits Tax" by J. A. Phillips, Vice-President, American Institute of Accountants.

"Current Tax Payment Act—December 15 Declarations" by O. E. Fischer of Peat, Marwick, Mitchell & Co., St. Louis.

Dinner

Joint Meeting with St. Louis Chapter, National Association of Cost Accountants

Presiding: Professor John J. Lang, St. Louis University.

Papers: "War Contracts, Cost and Profits" by Victor H. Stempf, President, American Institute of Accountants.

BERKELEY, DECEMBER 18, 1943

Morning Program

Presiding: Professor Perry Mason, University of California.

Round Table: "Wartime and Postwar Problems in Teaching Accounting." Panel Discussion by—

Dean E. T. Grether, University of California

Professor Barrett F. McFaden, Stanford University

Professor Victor E. Storli, Fresno State College

Professor Robley E. Passalacqua, Sacramento Junior College

Dean Myron M. Strain, Golden Gate College

Luncheon

"Replacement and Book Value," Professor Henry R. Hatfield, University of California.

Afternoon Program

Presiding: Professor Maurice Moonitz, Stanford University.

Papers: "War Contract Renegotiation," by Professor Leonard A. Doyle, University of California.

"Accountants in OPA" by J. F. Halterman, Office of Price Administration, San Francisco.

"Accountant-Attorney Cooperation" by Professor Samuel D. Thurman, Jr., Stanford University.

"Some Problems of Labor Union Auditing" by C. C. Meredith, National Labor Bureau.

A MESSAGE FROM THE RETIRING PRESIDENT

Problems of 1943. The wartime emergencies did not by-pass the Association; we were no more sheltered than others. As a result, many important questions, new to our experience, had to be faced in 1942, and others in 1943.

Some of the questions were these: Would abandonment of the annual convention in 1942 (necessitated by restrictions on travel and congestion in hotels) and the use of mail ballots for election of

officers tend to weaken the confidence or interest of the membership? Could the inescapable decrease in the number of papers available for publication be quickly overcome so that the ACCOUNTING REVIEW could be kept going? Was there a chance that emergency conditions would result in cancellation of advertising contracts, severe decreases in membership, and further restrictions upon Association activity?

Some of the answers are becoming clear: The Association has come through the year in good financial condition: the membership has held up well in spite of unusual conditions and the lack of an early campaign for members; the quarterly issues of the ACCOUNTING REVIEW have come along in orderly succession, thanks to the coöperative efforts of many people; and the Association, through the regional programs, has come in contact with more people in business and the profession than is usually the case.

In the name of the Association I wish to thank all who helped to bring these problems to such a successful solution; and I wish personally to urge upon them and all others who are available a comparable measure of loyal support and assistance to the new officers. We will not be out of the woods for some time yet.

Membership Activities. Owing to a variety of causes no membership campaign was conducted during the year. However, work that started late had the result by the middle of February of cancelling the 1943 deficit of 50 members by showing 51 new members. Two experiments were carried on in an attempt to select a way which could become standard procedure for someone who might be given continuing responsibility for keeping up a steady pressure for members and a working fund to be used for this purpose. For \$300 several states could be canvassed each year.

After a revised pamphlet was printed outlining the Association's purposes and activities, this together with a reprint of the table of contents of a recent issue of the ACCOUNTING REVIEW was sent by the president to about 130 accounting teachers in the smaller schools in Minnesota, Iowa, Illinois, and Michigan. (Address lists were prepared by an Association member in each state.) Result: 7 new members; not a very successful return in this year of school depression.

Professor D. Lyle Dieterle of Indiana University conducted an experimental state campaign. He sent out 500 mimeographed letters by first class mail, enclosing a 3¢ self-addressed envelope for reply. By February 21 there had been new members secured and enough more are expected to make a 10 per cent effective result. Counting only postage, \$30 (nothing for paper, typing etc.), the cost is 60¢ per new member. Most of these returns came from non-teachers; the basic mailing lists were made from the membership of the state society of CPA's and the state chapters of NACA.

These results could no doubt be duplicated in a number of states if the attempt were fully planned and carefully executed. Of course it needs no repetition that members should be consistently solicited in the schools after this depression has passed.

Regional Programs. I believe that regional programs can be used again with advantage in new areas. There are several reasons. Travel restrictions are likely to continue; legislation, especially by a small, almost local convention, is still inappropriate under present conditions; the number of people reached in several regional programs has been very satisfactory and the papers have been on timely subjects; the ACCOUNTING REVIEW needs the support that these papers can provide; the expense of the local programs has been modest and

no important new burdens have fallen upon the officers as a result of the several programs.

It should perhaps be said once more that regional programs, however advantageous in the emergency, should not be considered a precedent for a permanent policy. Suggestions looking toward establishing regional chapters of the Association have been declined by the executive committees several times in past years. Although some members on the West Coast believe that more good than harm would result if these were permitted, they have nevertheless loyally supported the national conventions, when we had them, by attending and helping whenever possible.

Monographs. In my opinion a way should be found to separate research by Association committees and the work of securing and editing monographs published through the life membership fund. Publication of monographs is a most desirable Association activity, but it is not Association research. If the Association has something to say, its statements would best come from special committees rather than from the executive committee as such.

I am especially appreciative of the work done this year by W. A. Paton, George D. Bailey, and Stephen Gilman, the three serving as a committee on monographs. If the paper shortage had not interfered we would have had important concrete results before now.

The time may come when monographs will be regularly supervised by a small committee whose chairman as a regular practice will also be a member of the editorial board that supervises the ACCOUNTING REVIEW. If then the third member of that board should relieve the secretary's office of the burden of making advertising contracts and getting advertising copy to the printer, the result would be to bring all publication activities under the com-

mittee system, and still preserve a useful degree of concentration.

Educational Research. It seems to me that practicing accountants have a measure of responsibility: (1) for pointing out the objectives of accounting education; (2) for training staff men beyond the work given in college courses; and (3) for steadily expanding the area where a definite amount of education is a prerequisite for taking the CPA examination. On the other hand, I consider that the Association has a major responsibility for carrying on research which is pointed toward improved curriculums of study. It is not easy to devise ways and means of carrying out any of these responsibilities. Educators particularly face trying problems in this connection because they must strive to give effect both to the increasingly social orientation of accountancy and to the growing complexity of its technical methods.

I believe therefore that long-time projects of research related to accounting education should be definitely planned and committees established to work on them. Such research need not be considered as aimed at suggesting programs of study that involve increased specialization in accounting techniques or that imply abandoning the idea of combining in due proportion professional education and cultural education in the same program. The accounting content of study programs has already been given constructive consideration in the Association; but the cultural aspect, usually considered as constituting forty to fifty per cent of the total program, has not received a similarly analytical discussion. The present is an unusually good time to explore in detail the various ways in which certain amounts of certain cultural subjects could be fitted into a program wherein the primary emphasis was upon accountancy and its necessarily allied subjects.

Research Projects. The year 1944 might be a good time to organize four small research committees to consider four problems:

1. Can there be a satisfactory formulation of general principles regarding cost accounting, as distinguished from descriptions of cost accounting methods?
(This project was favorably discussed in the 1943 executive committee and introductory approaches have already been made by R. L. Dixon and A. L. Prickett.)
2. Are the universities interested in being of assistance in formulating and in making practical use of psychological tests designed to reveal aptitudes for accounting work?
(The American Institute of Accountants has established a committee to study, with assistance from psychologists, the possibilities of testing the aptitudes for a career in public accounting.)
3. What should be the content of the education of private accountants, if that is to be different from preparation for public accounting?
4. What should be the content of the education of public accountants, especially in regard to the non-technical courses?

In my judgment small committees should be appointed for each project and given a modest budget which would enable the members to meet a few times each year.

Supplementing these "working committees," it would be helpful if there were two large "consultive committees." Statements for publication and proposals that originated in "working committees" could then be subjected before publication to examination and comment (by correspondence) by members of a large "consultive committee" consisting of members of the Association working in relevant fields. As a result of this approach, any statements which finally emerged could be considered to reflect the thought of the Association to a higher degree than would be true of a proposal by a small committee alone.

As to the membership of the larger committees, the principal aim should be to

have them include a representative from each university which meets a few pertinent standards. For the public accounting committee the standard for the schools could be:

1. Students may major in accountancy for a bachelor's degree.
2. At least thirty semester hours (or the equivalent) of accounting courses are regularly available.
3. The work regularly offered towards a bachelor's degree includes separate courses in CPA problems, auditing, accounting theory, commercial law, and income tax.
4. The teaching staff includes two or more Certified Public Accountants.

For the private accounting committee the standards for the schools could be:

1. Students may major in accountancy for a bachelor's degree.
2. At least thirty semester hours (or the equivalent) of accounting courses for a degree are regularly available.
3. The work regularly offered towards a bachelor's degree includes a total of at least ten semester hours in cost accounting, industrial accounting systems, managerial accounting, budgeting, controllership, and like courses.

I make these recommendations in the belief that useful purposes would be served by a continuing exchange of ideas about educational programs, and that it would be helpful if hypothetical programs, variously designed to serve differing objectives and different types of schools, were prepared and circulated for criticism and comment. Out of such discussions clear ideas of new possibilities for educational service might develop.

If it is worth while to advocate the establishing of educational requirements for admission to CPA examinations, it is also worth while to study ways of making education more and more effective as a foundation of the profession.

REPORT OF SECRETARY-TREASURER

The net income of the General Fund for the year 1943 amounted to \$1,265.80. This

compares with \$2,205.39 for 1942. The difference is accounted for, principally, through a decrease in ACCOUNTING REVIEW subscription revenue of \$381.32 and increases of \$259.18 over the negligible convention expenses of 1942, and \$399.01 net increase in all other expenses. Deferred subscription income amounting to \$1,239.55 compares with \$722.40 for 1942.

The increase in this figure indicates a decided increase in subscription activity and will bring about a substantial increase in subscription income for 1944.

Membership in the Association suffered a net decline of 50 during 1943. This may be attributed in part to the war, but principally to the fact that no membership campaign was put on until late in the year. Details of changes in membership for 1943 are as follows:

Number of members at December 31, 1942	1,260	
New members in 1943	81	
	<u>1,341</u>	
Decreases:		
Resignations in 1943	57	
Deaths in 1943	8	
Dropped in 1943	66	131
	<u>121</u>	
Balance, Membership at December 31, 1943	1,210	

ROBERT L. DIXON

AUDITOR'S REPORT

January 20, 1944

American Accounting Association:

We have examined the balance sheets of the General Fund and the Life Membership Fund of the American Accounting Association as of December 31, 1943, and the statements of income and expense for the year then ended, have reviewed the accounting procedures of the Association and, without making a detailed audit of the transactions, have examined or tested accounting records of the Association and other supporting evidence, by methods and to the extent we deemed appropriate. Our examination was made in accordance with generally accepted auditing standards applicable in the circumstances and included all procedures which we considered necessary.

In our opinion, the accompanying balance sheets and related statements of income and expense present fairly the position of the General Fund and the Life Membership Fund of the American Accounting Association at December 31, 1943, and the results of operations for the year, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

ERNST & ERNST
Certified Public Accountants

BALANCE SHEET—GENERAL FUND
American Accounting Association
December 31, 1943

Assets			
Cash			\$4,318.06
United States Savings Bonds, Series F—at cost		2,516.00	
Dues receivable	\$ 618.00		
Less reserve	565.00		53.00
Subscriptions receivable	\$ 98.00		
Less reserve	50.00		48.00
Office equipment		22.00	
			<u>\$6,957.06</u>
Liabilities and Surplus			
Due to Life Membership Fund		\$ 276.63	
Deferred income:			
Dues	\$ 235.00		
Subscriptions	1,239.55		
Advertising	200.00		1,674.55
Surplus:			
Balance at December 31, 1942	\$3,740.08		
Net income for the year ended December 31, 1943	1,265.80	5,005.88	
			<u>\$6,957.06</u>

STATEMENT OF INCOME AND EXPENSE—
GENERAL FUND

American Accounting Association
Year ended December 31, 1943

Income:			
Dues	\$4,619.00		
Subscriptions	1,853.18		
Advertising	1,392.00		
Miscellaneous	29.07	\$7,893.25	
Expenses:			
ACCOUNTING REVIEW— publication cost	\$3,339.25		
ACCOUNTING REVIEW— reprints	200.89		
ACCOUNTING REVIEW— Editorial Board	436.40		
Provision for uncollectible dues	402.00		

Provision for uncollectible subscriptions.....	\$ 63.10	
Printing, postage, and stationery.....	365.90	
Clerical expenses.....	281.50	
Telephone and telegraph..	40.99	
American Institute bulletin mailing.....	39.12	
Secretary's compensation..	500.00	
Executive Committee expenses.....	82.47	
Convention expenses.....	271.87	
Nomination Committee expenses.....	191.63	
American Institute Council—travel.....	179.20	
Miscellaneous expenses....	233.13	\$6,627.45
Net Income.....		<u>\$1,265.80</u>

BALANCE SHEET—LIFE MEMBERSHIP FUND
American Accounting Association
December 31, 1943

<i>Assets</i>		
Cash.....	\$5,528.22	
Accrued interest on bank account.....	35.67	
United States Savings Bonds—Series F:		
Maturity value.....	\$3,400.00	
Less discount.....	867.00	2,533.00
Accounts receivable—monographs.....	\$ 31.60	
Less reserve.....	15.00	16.60
Account receivable from American Institute of Accountants.....	25.88	
Due from General Fund.....	276.63	
		<u>\$8,416.00</u>

<i>Net Worth</i>		
Contributions of life members.....		\$2,500.00
Transfers from General Fund.....		5,000.00
Surplus:		
Balance at December 31, 1942.....	\$ 739.65	
Net income for year ended December 31, 1943.....	176.35	916.00
		<u>\$8,416.00</u>

STATEMENT OF INCOME AND EXPENSE—
LIFE MEMBERSHIP FUND
American Accounting Association
Year ended December 31, 1943

<i>Income:</i>		
Sale of monographs.....	\$260.41	
Interest on bank deposit.....	70.00	
Interest on United States Savings Bonds, Series F.....	17.00	\$347.41
<i>Expense:</i>		
Royalties.....	\$ 6.01	
Cost of printing index to ACCOUNTING REVIEW.....	39.55	
Provision for bad debts—monographs.....	26.00	
Miscellaneous.....	9.13	80.69
		<u>\$266.72</u>
Less American Institute of Accountants' share of profit on sale of Monograph No. 3.....		90.37
Net Income.....		<u>\$176.35</u>

500.00
000.00

916.00

416.00

347.41

80.69

266.72

90.37

76.35